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**Summary of Along-Track
Data From the Earth
Radiation Budget
Satellite for Several
Major Desert Regions**

David R. Brooks
*Langley Research Center
Hampton, Virginia*

Marta A. Fenn
*Planning Research Corporation
Hampton, Virginia*



National Aeronautics
and Space Administration

Scientific and Technical
Information Division

Introduction

The Earth Radiation Budget Experiment (ERBE) is the latest in a series of satellite-based experiments to measure the Earth's radiant energy balance from space (Barkstrom 1984; House et al. 1986). This three-satellite system includes two sets of ERBE instruments on National Oceanic and Atmospheric Administration (NOAA) satellites, launched in November 1984 and September 1986, and one set on the Earth Radiation Budget Satellite (ERBS), launched in October 1984. The ERBS is in a 600-km, 57° orbit that, counting both ascending and descending nodes, precesses through 24 hours of local time in about 36 days. Most land surfaces of the Earth are visible from this orbit; in its normal cross-track scanning mode, the ERBS sees latitudes in the range of $\pm 65^\circ$.

During January and August of 1985, the ERBS scanner instrument was rotated 90° in azimuth, enabling it to scan forward and backward along its ground track. Each scan takes 4 seconds and produces 62 individual measurements from a set of preset instrument positions. This so-called along-track mode provides a unique set of measurements that, because of operational considerations on the ERBS, will not be repeated in the foreseeable future. Because of the ERBS's quasi-global coverage and its precession in local time, most of the Earth's major surface features have been observed in this mode under a variety of solar illumination conditions. In this study, along-track measurements over four major desert regions and the Sahel region of Africa are summarized.

Central to the analysis of space-based measurements of radiance is the integration of radiances over the hemisphere to obtain broadband longwave (LW) and shortwave (SW) radiant exitances. Because of the sparse sampling of the hemispherical coordinates that is a fundamental limitation of satellite-based measurements, even when multiple satellites are available, such integrations must rely on statistical or analytical models of the dependence of radiance on viewing and solar geometry.

For integration of LW radiance, these models must quantify the well-known limb-darkening phenomenon: most surfaces (including cloud "surfaces") appear colder when viewed obliquely from space than when viewed near nadir. The limb-darkening phenomenon is conventionally thought to depend only on the viewing zenith angle for fixed solar conditions. Integration of SW radiance over the hemisphere depends, in general, on both viewing and azimuth angles through the so-called bidirectional function, which describes the normalized distribution

of radiance on the hemisphere at a given solar zenith angle.

In the LW case, ERBS along-track measurements provide the ideal experiment for quantifying limb darkening, as each point along a satellite ground track can be viewed over the entire range of viewing zenith angles within the span of only a few minutes. In the SW case, each overflight of any geographically restricted area provides only a "slice" through the bidirectional function at essentially constant solar zenith angle and a pair of azimuth angles separated by about 180° —one value for the forward-viewing half of the scan and the other value for the backward-viewing half. However, even this restricted vantage point is extremely valuable, as it provides an unambiguous view of the bidirectional space that any successful bidirectional model must accommodate.

Scene Identification for the Earth Radiation Budget Experiment

ERBE is unique among satellite-based experiments to measure the Earth's radiation budget: a substantial effort has been directed toward providing a set of algorithms for scene identification that is an integral part of the data analysis software (Smith et al. 1986). This analysis begins with an a priori division of the Earth's surface into four geotypes: land, ocean, desert, and snow. The algorithms classify each geotype as clear, partly cloudy, mostly cloudy, or overcast by examining SW and LW radiance values (or just LW radiances at night). For any given underlying geotype (with the possible exception of snow), clear areas are warmer and darker (during the day) than cloud-contaminated conditions over the same geotype. A statistical approach—called a maximum likelihood estimator (MLE)—is used to partition the radiances into one of four categories ranging from clear to overcast (Smith et al. 1986). Table I gives the nominal cloud amount limits for each classification. Note that even though the clear scene classification is nominally limited to 5-percent cloud cover, the actual performance of the MLE is as yet unknown, so that more or less cloud contamination may actually exist in scenes classified as clear.

There are several potential problems associated with the ERBE scene analysis when applied to clear deserts. First, there are no separate cloudy classifications for deserts; the partly and mostly cloudy classifications are identical to those used over all land geotypes (Smith et al. 1986; Suttles et al. 1988). Second, the ERBE overcast classification is the same for all underlying geotypes, even though there is some evidence that land and nonland overcast scenes have different directional properties. Third, the large diurnal temperature cycles that characterize desert surfaces

(see, for example, Brooks 1987; Minnis and Harrison 1984; Saunders and Hunt 1980) complicate the assignment of clear-cloud thresholds to a LW channel, especially with thresholds that are not tailored specifically for deserts. Fourth, desert surfaces are often bright enough during the day to cause confusion with partly cloudy scenes (Brooks 1987); this can be a problem even if the cloud detection thresholds are optimized for deserts. Substantial cloud cover can regularly be found over almost all desert regions during at least part of the year (Warren et al. 1986), so these considerations are significant in every application of ERBE data that seeks to extract a cloud-free subset of desert data.

ERBS Along-Track Data Set

The ERBS along-track data are found on ERBE Processed Archive Tapes (PATs) for January 16–28 and August 7–14, 1985. (The ERBE PATs are archived at the National Space Sciences Data Center (NSSDC), NASA Goddard Space Flight Center, Greenbelt, MD 20771.) Data for four major desert regions and the Sahel region south of the Sahara Desert have been studied. The deserts include the Arabian peninsula, the central and western part of Australia, and the Sahara and Kalahari Deserts. The initial and final days in each sequence of along-track measurements contain a mixture of cross-track and along-track data. These days generally add little unique information to the data base, so there is little motivation for extracting the along-track orbits. However, an overflight of Australia on January 28 has been retained because it corresponds to the smallest solar zenith angle on any of the desert overflights studied. An August 14 overflight of Australia has also been retained because of the relatively small amount of daytime data available in the Southern Hemisphere winter. Figure 1 illustrates the boundaries of each desert region and the location of ERBS ground tracks during those days for which along-track data were processed for this study. Note that the ERBS ground tracks nearly overlap on roughly a 3-day cycle. The ERBS traverses a degree of Earth central angle in about 15 seconds. Thus, even the longest ground track defined in this study, about 20° , can be covered in less than 10 minutes, counting the time during which a region is viewed ahead of or behind the nadir position of the spacecraft. In all cases, boundaries for the regions have been kept away from coastlines even when desert terrain extends directly to a coast, in order to minimize the possibility of scene contamination when viewing the scene obliquely. In some cases, the desert boundaries used for this study include areas that ERBE's software considers non-desert land. The desert regions contain a large

variety of terrain, ranging from the vast sand seas of the Arabian peninsula, to arid mountainous terrain in the Sahara Desert, to the savannah-like interior of the Kalahari Desert. The Sahel is of particular interest because of its seasonal transitions between desert and vegetated land; in this region, the anisotropic behavior of LW and SW radiances may be seasonally dependent. At all the desert-land boundaries, the ERBE geotype distinction is somewhat arbitrary, especially when seasonal fluctuations in vegetation are expected. It is not clear that the land and desert geotypes will (or should) be distinguishable just on the evidence of the angular dependence of radiances.

Figure 2 illustrates the distribution of latitudes as a function of local time for representative ERBS orbits on the days included in the along-track data set. Clearly, a wide range of solar zenith angle conditions are available. The conditions of highest Sun are available in the Southern Hemisphere deserts during January 1985; the orbit plane orientation favors afternoon measurements. In the northern deserts during August 1985, the orbit orientation is such that midday and afternoon observations are missing.

Details of viewing geometry and scene information for all ERBS along-track overflights of the regions illustrated in figure 1 are summarized in table II. The information in the table includes the average solar zenith angle (θ_o), an indication of whether the measurements are made before or after local noon (AM or PM), the two mean relative azimuth angles (φ) at which the surface was observed, and the approximate longitude range of the data (lon). The angles are defined in figure 3. Note that the relative azimuth angle between a space-based viewer and the Sun is defined as 0° in the forward-reflecting half of the principal plane, so the relative azimuth of the Sun is always 180° . The two mean relative azimuth angles associated with an overflight of any specified region are calculated only for viewing zenith angles greater than 5° , as relative azimuth becomes undefined as the viewing zenith angle approaches 0° . Longitude information is given to identify separate overflights in cases where two consecutive ground tracks fall within the same region; this is a common occurrence in the Sahara and Sahel data.

Of particular significance for interpretation of ERBE data is the relationship between scene classification and viewing geometry. In table II, the available along-track data are assigned to one of eight 10° viewing zenith angle bins from 0° to 80° . (There are no reliable measurements past 80° .) The total number of measurements observed in each bin is noted in the table. Then, for each bin, the fraction of the measurements is given for each scene classification; only

scene classifications observed in at least one viewing zenith angle bin are listed. For each viewing zenith angle bin, the individual fractions add to 1 (neglecting a possible round-off discrepancy of ± 0.01).

For any use of radiance data, it is desirable that the scene identification be independent of viewing geometry. Otherwise, the geometry-dependent redistribution of radiances can distort the radiance levels for particular scene classifications. If the radiances are being used for the development of anisotropic models, for example, a geometry-dependent allocation of radiances can lead to misrepresentation of the anisotropic behavior for a given scene type. It is clear from table II that such a redistribution is taking place for radiance as a function of viewing zenith angle. As a generalization it is concluded that desert scenes are less likely to be classified as clear as the viewing zenith angle increases. Note that this generalization applies also to the Sahel region, which is classified mostly as land, rather than as desert.

If the radiometric properties of clear surface scenes are of interest, reassignment of radiances to some other scene type can have only a biasing effect because the clear population either includes cloud-contaminated radiances at small viewing zenith angle or excludes some uncontaminated radiances at large viewing zenith angle; simple physical arguments favor the latter possibility. As the ERBE scanner views a surface more obliquely, both the atmospheric path length and the surface area included in the instrument's field of view increase. Consequently, it is easy to imagine that scenes classified as clear when viewed at nadir are actually, or are perceived to be, contaminated with clouds when they are viewed obliquely with the inclusion of surrounding terrain that now falls within the field of view. Even though it may be possible, in principle, to take these considerations into account in the design of scene classification algorithms, it is unfair to fault the ERBE scene identification algorithms for the observed dependence of scene classification geometry. Ultimately, the ability to distinguish between clear and cloudy scenes, especially over bright and variable surfaces like deserts, is limited by the spatial resolution of the ERBE scanner and by the real variability that exists within its field of view.

The principal information extracted from this survey of along-track measurements is contained in figures 4.1 to 4.376, which illustrate the variation of LW and SW radiances (in W/m^2 per steradian) with viewing zenith angle for all the overflights listed in table II. (In a few cases for which the solar zenith angle is close to 90° , no SW data are given.) The figures are organized as follows:

	Fig. nos.	
	SW	LW
January 1985:		
Australia	4.1–4.18	4.72–4.97
Kalahari Desert	4.19–4.32	4.98–4.115
Sahara Desert	4.33–4.46	4.116–4.167
Arabian peninsula	4.47–4.52	4.168–4.188
Sahel	4.53–4.71	4.189–4.245
August 1985:		
Australia	4.246–4.254	4.288–4.303
Kalahari Desert	4.255–4.256	4.304–4.310
Sahara Desert	4.257–4.268	4.311–4.335
Arabian peninsula	4.269–4.273	4.336–4.347
Sahel	4.274–4.287	4.348–4.376

In each figure, a single overflight over each ERBE-identified scene type is divided into the forward- and the backward-viewing portion. Each of the two mean relative azimuth values associated with an overflight is identified with either an odd or an even number. Note that each of these figures is typically based on several hundred to a few thousand radiance measurements (recalling table II) averaged over a ground track of several hundred kilometers. The Sahara Desert and Australian regions, for example, encompass about 10° in latitude, over which the ERBS flies obliquely.

There are several notable features in these figures. For example, the SW data prominently illustrate the azimuthal dependence that is an important feature of the SW bidirectional function. In some cases, the changing nature of this dependence may be tracked through a wide range of solar zenith angles. For example, figures 4.1 to 4.18 illustrate SW radiances measured over Australia for solar zenith angles ranging from 17° to 81° . The dependence is difficult to quantify on the basis of just these data because the absolute radiance levels vary with surface brightness as well as solar zenith angle, and the relative azimuths are not constant from one figure to the next. Nonetheless, there are discernible qualitative trends. A transition from limb brightening to limb darkening is illustrated for the Australian data in figures 4.1 to 4.18. At large solar zenith angle, the clear desert SW radiances are strongly limb brightened. As the solar zenith angle decreases, the SW radiances actually become limb darkened (as in figs. 4.17 and 4.18). However, the radiances at large solar zenith angle are within 40° of the principal plane (that is, the relative azimuths are within 40° of 0° or 180°), while the radiances at small solar zenith angle are nearly perpendicular to the principal plane. The very

selective angular sampling of the along-track data renders them insufficient to allow formulation of bidirectional models without auxiliary data. Brooks (1987), for example, has used data from ERBS, the European satellite METEOSAT, and the Geostationary Operational Environmental Satellite (GOES) to develop an analytic parametric model of the bidirectional function for deserts.

Other notable features are found in the LW radiances. In some cases, a strong azimuthal dependence of LW radiance is noted, especially in the cloudy scene classifications. (See, for example, the Arabian peninsula data in fig. 4.181.) This dependence sometimes extends (although much less prominently) even to the clear scene, in contradiction to the conventional description of the limb-darkening phenomenon. Figures 4.176, 4.179, 4.180, and 4.181—nighttime scenes in the Arabian peninsula—all exhibit some azimuthal dependence of LW radiance at larger viewing zenith angles. These cases appear to be a result of some azimuthal dependence in the scene classification algorithms. Figures 4.102 and 4.107—daytime scenes in the Kalahari Desert—also exhibit this dependence in clear desert, land, and other classifications. With respect to the clear scenes, Brooks (1987) has suggested that at least some of the azimuthal dependence may be caused by thermal shadowing from surface features. However, there are insufficient corroborative data to separate true thermal shadowing effects from scene classification discrepancies.

The conventional concepts of LW limb darkening and the SW bidirectional function tend to favor surfaces that are flat and homogeneous on a macroscopic scale. Clearly, the presence of macroscopic features (which can be as large as mountains or as small as gravel on a sandy surface) adds an unknown factor that previous physical descriptions of anisotropic behavior do not necessarily take into account. Bowker and Davis (1987) have suggested that shadowing plays a substantial role in the interpretation of SW radiances over deserts. Brooks (1987, 1986) has ignored the relatively small LW azimuthal dependence in the derivation of a parametric model of desert limb darkening from the ERBS along-track data.

In the ERBE cloudy classifications, shadowing can play a prominent role in bidirectional reflectance. Simply put, clouds that have substantial vertical dimensions present different radiances when viewed from opposite directions relative to the Sun because one side is sunlit and the other side is dark. The statistical bidirectional models used by ERBE are obtained predominantly from Nimbus 7 satellite data. Therefore, it might be expected that the effects of

randomly oriented three-dimensional cloud structure are included in the model (even if only in the form of large variances.) However, for the ERBE models, no distinctions are made between various cloud types. In particular, no attempt is made to separate clouds on the basis of their likely three-dimensional structure. Further, theoretical models of bidirectional behavior tend to favor flat surfaces and, in the case of clouds, plane parallel layers. Features that are not randomly oriented, such as cloud patterns relative to prevailing winds, mountain ranges, or sand dunes, pose a new challenge for defining bidirectional behavior; it is not clear that conventional bidirectional models can address this strongly three-dimensional behavior within their two-dimensional framework.

The extent to which the ERBE scene classification algorithms may reassign radiances among cloudy categories based on unmodeled changes in brightness or temperature (that is, on the basis of unmodeled shadowing effects that the available bidirectional functions do not account for) is unknown. If shadowing plays a significant role in the interpretation of ERBE data, it is likely that the conventional formulation of the SW bidirectional function, incorporating an azimuth angle describing the position of an observer relative to the Sun, needs to be supplemented with an additional azimuth angle that locates an observer relative to the orientation of prominent surface features.

A conventional description of limb darkening over clear land and desert surfaces that depends on viewing zenith angle is easily extracted from the along-track data. In the model developed by Brooks (1987, 1986), a single parameter—the exponent of a normalized atmospheric path length—is shown to be sufficient to model and distinguish surfaces over a wide range of viewing zenith angles. It is generally recognized that for surfaces exhibiting large diurnal temperature fluctuations, daytime limb darkening should be substantially greater than nighttime limb darkening. This conclusion follows directly from simple physical considerations. The radiance of a hot daytime surface viewed from overhead is predominantly influenced by the surface temperature. As the same surface is viewed more obliquely, the radiance is influenced more by the temperature of the atmosphere. Consequently, the observed daytime limb darkening is relatively large. The same surface viewed at night appears much colder in the nadir view, even though the radiance from a very oblique nighttime view may be nearly identical to the daytime view. This difference can easily be observed by comparing day-night pairs of LW radiance. Not only are the absolute radiances much lower at night, but the variation with

viewing zenith angle is typically smaller when expressed, for example, as a fraction of the nadir radiance.

Finally, note that an apparently arbitrary assignment of nearly identical radiances into one category or another is sometimes evident in these figures, especially at large values of solar and viewing zenith angles. For example, in the SW and LW data for Australia shown in figures 4.7 and 4.78, there is some intermingling of clear with partly cloudy scene types. (Compare fig. 4.78 with 4.82, in which the scene classifications seem more successfully stratified into separate radiance levels.) These apparently conflicting classifications may be a result of changes in surface brightness in different parts of the overflight. That is, a particular portion of the overflight may view a surface with about the same brightness or temperature as another portion of the overflight where the surface is contaminated with clouds or contains significant topographic features. This is further evidence of the scene classification difficulties expected over bright and highly variable desert or land surfaces.

Concluding Remarks

The Earth Radiation Budget Satellite (ERBS) along-track data, taken during January and August 1985, constitute a valuable and unique set of measurements from the Earth Radiation Budget Experiment (ERBE). Note that a similar set of measurements was made from the NOAA 9 spacecraft during August 1985, but the Sun synchronous orbit restricts the measurements to a relatively small range of solar zenith angles. Because of spacecraft operational considerations, the along-track scanning mode will not be repeated in the foreseeable future. The data presented in this study, encompassing desert regions in both the Northern and Southern Hemispheres, are only a small subset of the available along-track data. However, a study of desert scenes illuminates and accentuates many facets of the problems of scene classification and description of the anisotropic characteristics of the Earth's radiation. The special sampling properties of the along-track measurements illustrate several features of anisotropic behavior that are much more difficult to isolate in the normal cross-track scanning mode. The longwave (LW) radiances provide an ideal experiment to quantify the limb-darkening phenomenon, and the shortwave (SW) radiances provide unambiguous examples of bidirectional reflectance that any successful model must accommodate.

The along-track data indicate that the usual descriptions of anisotropic behavior may be insufficient to describe the angular distributions of either LW

or SW radiance observed from space. The presence of azimuthal effects that may be related to thermal or visible shadowing indicates that the azimuthal orientation of macroscopic surface features may need to be incorporated into models of anisotropic behavior.

NASA Langley Research Center
Hampton, VA 23665-5225
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Table I. Scene Classifications for the Earth Radiation Budget Experiment

ID number	Description	Estimated mean cloud amount, ^a percent
1	Clear: Ocean	0-5
2	Land	
3	Snow ^b	
4	Desert ^c	
5	Land-ocean mix	
6	Partly cloudy: Ocean	5-50
7	Land	
8	Land-ocean mix	
9	Mostly cloudy: Ocean	50-95
10	Land	
11	Land-ocean mix	
12	Overcast	95-100

^aBecause of the statistical nature of the ERBE scene identification algorithms, these scene classifications are only nominal values.

^bSnow scenes are classified as either clear or overcast.

^cCloudy desert scenes are merged with cloudy land scenes.

Table II. Viewing Geometry and Scene Classification Data for
ERBS Along-Track Measurements in Five Desert Regions

[The radiances presented in figs. 4.1–4.376 correspond to the overflights
summarized in this table; the figures can be cross-referenced with the table
according to date, geometry, and location; symbols are defined in fig. 3]

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Australia									
Date: 1/17/85	$\vartheta_o = 62(\text{PM})$	$\varphi = 138, 318$		$135 < \text{lon} < 140$					
Total population	128	131	128	129	128	131	98	63	
Clear desert	1.00	1.00	0.98	0.93	0.88	0.83	0.72	0.14	
Partly cloudy	0.00	0.00	0.02	0.07	0.13	0.17	0.28	0.83	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
Date: 1/17/85	$\vartheta_o = 67(\text{AM})$	$\varphi = 39, 220$		$120 < \text{lon} < 125$					
Total population	107	105	107	108	106	105	83	50	
Clear desert	0.16	0.16	0.13	0.10	0.00	0.00	0.00	0.00	
Partly cloudy	0.66	0.67	0.73	0.75	0.98	0.99	1.00	0.28	
Mostly cloudy	0.18	0.17	0.14	0.15	0.02	0.01	0.00	0.72	
Date: 1/17/85	$\vartheta_o = 75(\text{AM})$	$\varphi = 36, 218$		$137 < \text{lon} < 140$					
Total population	41	44	40	40	42	45	31	24	
Clear land	0.85	0.77	0.90	0.82	0.71	0.78	0.94	0.33	
Partly cloudy	0.15	0.23	0.10	0.17	0.29	0.22	0.06	0.67	
Date: 1/18/85	$\vartheta_o = 61(\text{PM})$	$\varphi = 138, 317$		$128 < \text{lon} < 140$					
Total population	402	406	400	405	404	406	301	203	
Clear land	0.04	0.03	0.04	0.02	0.00	0.00	0.00	0.00	
Clear desert	0.68	0.67	0.65	0.65	0.63	0.57	0.47	0.11	
Partly cloudy	0.07	0.09	0.10	0.13	0.16	0.21	0.29	0.59	
Mostly cloudy	0.05	0.06	0.05	0.07	0.08	0.09	0.11	0.14	
Overcast	0.15	0.16	0.14	0.13	0.13	0.13	0.13	0.16	
Date: 1/18/85	$\vartheta_o = 75(\text{AM})$	$\varphi = 37, 218$		$129 < \text{lon} < 140$					
Total population	401	404	400	404	403	379	327	172	
Clear desert	0.67	0.63	0.62	0.60	0.56	0.44	0.28	0.00	
Partly cloudy	0.30	0.33	0.34	0.35	0.38	0.50	0.66	0.92	
Mostly cloudy	0.04	0.04	0.04	0.05	0.06	0.06	0.06	0.08	
Date: 1/19/85	$\vartheta_o = 57(\text{PM})$	$\varphi = 136, 316$		$120 < \text{lon} < 132$					
Total population	402	405	401	404	403	404	303	205	
Clear desert	0.28	0.28	0.27	0.23	0.18	0.03	0.00	0.00	
Partly cloudy	0.29	0.28	0.27	0.26	0.26	0.41	0.47	0.28	
Mostly cloudy	0.30	0.32	0.31	0.37	0.40	0.41	0.40	0.54	
Overcast	0.13	0.13	0.14	0.14	0.15	0.14	0.14	0.18	
Date: 1/19/85	$\vartheta_o = 80(\text{AM})$	$\varphi = 36, 216$		$122 < \text{lon} < 132$					
Total population	404	405	403	405	401	384	305	119	
Clear desert	0.13	0.12	0.08	0.06	0.03	0.00	0.00	0.00	
Partly cloudy	0.32	0.32	0.28	0.24	0.23	0.17	0.15	0.00	
Mostly cloudy	0.45	0.44	0.52	0.57	0.67	0.67	0.55	0.31	
Overcast	0.11	0.13	0.12	0.13	0.08	0.15	0.29	0.69	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Australia (cont.)									
Date: 1/20/85	$\vartheta_o = 49(\text{PM})$	$\varphi = 130, 311$		$137 < \text{lon} < 140$					
Total population	58	61	58	55	58	55	41	26	
Clear desert	1.00	1.00	0.97	0.76	0.64	0.27	0.02	0.00	
Partly cloudy	0.00	0.00	0.03	0.24	0.36	0.73	0.95	0.65	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.35	
Date: 1/20/85	$\vartheta_o = 55(\text{PM})$	$\varphi = 136, 316$		$120 < \text{lon} < 123$					
Total population	24	24	24	31	33	43	37	27	
Partly cloudy	0.83	0.67	0.46	0.16	0.00	0.00	0.00	0.00	
Mostly cloudy	0.04	0.21	0.38	0.55	0.67	0.53	0.46	0.37	
Overcast	0.13	0.13	0.17	0.29	0.33	0.47	0.54	0.63	
Date: 1/20/85	$\vartheta_o = 81(\text{AM})$	$\varphi = 34, 215$		$120 < \text{lon} < 125$					
Total population	183	181	183	169	164	165	135	36	
Clear desert	1.00	1.00	1.00	0.98	0.87	0.62	0.58	0.06	
Partly cloudy	0.00	0.00	0.00	0.02	0.13	0.38	0.42	0.94	
Date: 1/21/85	$\vartheta_o = 48(\text{PM})$	$\varphi = 132, 312$		$130 < \text{lon} < 140$					
Total population	403	405	404	404	402	403	305	202	
Clear land	0.15	0.15	0.15	0.15	0.14	0.10	0.06	0.00	
Clear desert	0.53	0.53	0.53	0.52	0.47	0.39	0.32	0.00	
Partly cloudy	0.06	0.05	0.05	0.06	0.11	0.22	0.31	0.56	
Mostly cloudy	0.07	0.09	0.08	0.08	0.07	0.09	0.14	0.33	
Overcast	0.19	0.18	0.18	0.19	0.20	0.20	0.16	0.10	
Date: 1/21/85	$\vartheta_o = 89(\text{AM})$	$\varphi = 33, 213$		$132 < \text{lon} < 140$					
Total population	414	411	393	387	350	334	258	132	
Clear desert	0.71	0.72	0.72	0.66	0.56	0.53	0.54	0.54	
Partly cloudy	0.08	0.06	0.06	0.13	0.24	0.17	0.21	0.20	
Mostly cloudy	0.22	0.19	0.15	0.13	0.19	0.22	0.20	0.27	
Overcast	0.00	0.03	0.07	0.09	0.02	0.07	0.05	0.00	
Date: 1/22/85	$\vartheta_o = 44(\text{PM})$	$\varphi = 130, 310$		$122 < \text{lon} < 132$					
Total population	430	415	404	405	381	346	300	223	
Clear land	0.00	0.00	0.00	0.01	0.01	0.03	0.04	0.00	
Clear desert	0.54	0.55	0.54	0.51	0.51	0.38	0.30	0.04	
Partly cloudy	0.26	0.26	0.27	0.29	0.31	0.38	0.48	0.72	
Mostly cloudy	0.17	0.15	0.15	0.16	0.14	0.19	0.18	0.24	
Overcast	0.03	0.05	0.04	0.04	0.03	0.02	0.00	0.00	
Date: 1/22/85	$\vartheta_o = 93(\text{AM})$	$\varphi = 31, 211$		$123 < \text{lon} < 134$					
Total population	404	407	412	400	393	382	296	175	
Clear desert	0.59	0.59	0.58	0.59	0.55	0.51	0.51	0.43	
Partly cloudy	0.20	0.21	0.22	0.19	0.25	0.30	0.39	0.51	
Mostly cloudy	0.21	0.19	0.18	0.21	0.18	0.20	0.11	0.06	
Overcast	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Australia (cont.)									
Date: 1/23/85	$\vartheta_o=41(\text{PM})$	$\varphi=131, 310$		$120 < \text{lon} < 126$					
Total population	146	151	149	151	146	143	124	83	
Clear desert	0.63	0.58	0.56	0.43	0.42	0.31	0.32	0.02	
Partly cloudy	0.26	0.29	0.27	0.39	0.34	0.36	0.25	0.46	
Mostly cloudy	0.11	0.13	0.17	0.18	0.24	0.32	0.43	0.52	
Date: 1/23/85	$\vartheta_o=95(\text{AM})$	$\varphi=28, 209$		$120 < \text{lon} < 128$					
Total population	256	266	266	255	248	243	204	145	
Clear desert	0.91	0.88	0.89	0.91	0.93	0.93	0.92	0.66	
Partly cloudy	0.09	0.12	0.11	0.09	0.07	0.07	0.08	0.34	
Date: 1/24/85	$\vartheta_o=35(\text{PM})$	$\varphi=125, 305$		$131 < \text{lon} < 140$					
Total population	404	402	401	398	397	393	293	190	
Clear land	0.13	0.13	0.12	0.12	0.11	0.08	0.04	0.00	
Clear desert	0.66	0.66	0.66	0.68	0.68	0.70	0.72	0.43	
Partly cloudy	0.01	0.02	0.02	0.02	0.02	0.04	0.07	0.36	
Mostly cloudy	0.04	0.05	0.04	0.03	0.03	0.04	0.05	0.11	
Overcast	0.16	0.14	0.15	0.16	0.16	0.14	0.12	0.10	
Date: 1/24/85	$\vartheta_o=102(\text{AM})$	$\varphi=27, 206$		$133 < \text{lon} < 140$					
Total population	319	316	320	322	316	291	268	164	
Clear desert	0.44	0.43	0.42	0.43	0.47	0.46	0.54	0.51	
Partly cloudy	0.04	0.08	0.13	0.16	0.16	0.19	0.18	0.16	
Mostly cloudy	0.14	0.10	0.08	0.09	0.10	0.04	0.01	0.02	
Overcast	0.38	0.39	0.37	0.33	0.27	0.31	0.26	0.30	
Date: 1/25/85	$\vartheta_o=30(\text{PM})$	$\varphi=122, 303$		$123 < \text{lon} < 134$					
Total population	406	419	418	390	388	365	306	234	
Clear desert	0.99	0.97	0.96	0.96	0.94	0.93	0.89	0.47	
Partly cloudy	0.01	0.03	0.04	0.04	0.04	0.05	0.08	0.44	
Mostly cloudy	0.00	0.00	0.00	0.00	0.02	0.02	0.03	0.08	
Overcast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
Date: 1/25/85	$\vartheta_o=105(\text{AM})$	$\varphi=24, 205$		$125 < \text{lon} < 135$					
Total population	404	401	409	396	403	368	337	203	
Clear land	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	
Clear desert	1.00	1.00	1.00	1.00	1.00	0.99	0.98	0.90	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	
Date: 1/26/85	$\vartheta_o=27(\text{PM})$	$\varphi=123, 304$		$120 < \text{lon} < 126$					
Total population	256	256	258	251	248	250	195	130	
Clear desert	0.57	0.54	0.52	0.50	0.48	0.37	0.13	0.00	
Partly cloudy	0.10	0.16	0.19	0.26	0.29	0.37	0.56	0.38	
Mostly cloudy	0.24	0.21	0.19	0.17	0.19	0.22	0.31	0.62	
Overcast	0.09	0.09	0.09	0.06	0.04	0.04	0.00	0.00	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Australia (conc.)									
Date: 1/26/85	$\vartheta_o=108(\text{AM})$	$\varphi=21, 202$		$120 < \text{lon} < 127$					
Total population	325	324	332	317	322	283	271	157	
Clear desert	0.57	0.57	0.56	0.58	0.62	0.60	0.55	0.14	
Partly cloudy	0.39	0.39	0.42	0.39	0.38	0.40	0.44	0.80	
Mostly cloudy	0.04	0.03	0.02	0.03	0.00	0.00	0.01	0.06	
Date: 1/27/85	$\vartheta_o=21(\text{PM})$	$\varphi=112, 293$		$133 < \text{lon} < 140$					
Total population	327	324	326	325	326	326	246	163	
Clear land	0.19	0.19	0.18	0.17	0.12	0.07	0.04	0.00	
Clear desert	0.77	0.79	0.78	0.77	0.67	0.49	0.43	0.07	
Partly cloudy	0.04	0.02	0.04	0.07	0.21	0.44	0.52	0.93	
Date: 1/27/85	$\vartheta_o=115(\text{AM})$	$\varphi=19, 200$		$135 < \text{lon} < 140$					
Total population	245	245	254	237	243	216	209	124	
Clear land	0.14	0.14	0.10	0.09	0.12	0.13	0.11	0.00	
Clear desert	0.70	0.69	0.69	0.69	0.70	0.68	0.69	0.26	
Partly cloudy	0.12	0.14	0.16	0.18	0.13	0.13	0.11	0.61	
Mostly cloudy	0.03	0.01	0.02	0.02	0.02	0.02	0.03	0.07	
Overcast	0.01	0.01	0.03	0.03	0.03	0.04	0.05	0.06	
Date: 1/28/85	$\vartheta_o=17(\text{PM})$	$\varphi=109, 289$		$125 < \text{lon} < 135$					
Total population	404	401	404	402	405	402	303	202	
Clear desert	0.64	0.60	0.57	0.54	0.47	0.34	0.14	0.00	
Partly cloudy	0.25	0.28	0.32	0.34	0.41	0.55	0.76	0.45	
Mostly cloudy	0.12	0.11	0.11	0.12	0.11	0.12	0.10	0.55	
Overcast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Date: 1/28/85	$\vartheta_o=117(\text{AM})$	$\varphi=16, 197$		$126 < \text{lon} < 136$					
Total population	405	400	410	396	403	378	330	199	
Clear desert	0.46	0.44	0.43	0.39	0.37	0.32	0.25	0.01	
Partly cloudy	0.40	0.42	0.43	0.50	0.54	0.57	0.68	0.75	
Mostly cloudy	0.09	0.09	0.10	0.07	0.06	0.11	0.07	0.22	
Overcast	0.05	0.05	0.04	0.04	0.03	0.00	0.00	0.03	
Kalahari Desert									
Date: 1/17/85	$\vartheta_o=64(\text{PM})$	$\varphi=139, 320$		$14 < \text{lon} < 21$					
Total population	201	203	200	202	202	200	148	91	
Clear land	0.20	0.19	0.20	0.16	0.14	0.10	0.05	0.00	
Clear desert	0.37	0.38	0.37	0.36	0.34	0.31	0.20	0.00	
Partly cloudy	0.21	0.20	0.22	0.23	0.27	0.33	0.38	0.47	
Mostly cloudy	0.15	0.15	0.14	0.17	0.12	0.09	0.21	0.23	
Overcast	0.07	0.07	0.08	0.08	0.12	0.17	0.17	0.30	
Date: 1/18/85	$\vartheta_o=64(\text{PM})$	$\varphi=139, 321$		$14 < \text{lon} < 19$					
Total population	58	62	54	55	52	44	33	20	
Clear land	0.00	0.00	0.00	0.00	0.06	0.00	0.03	0.00	
Clear desert	1.00	0.95	0.93	0.85	0.81	0.73	0.48	0.15	
Partly cloudy	0.00	0.05	0.07	0.15	0.13	0.27	0.48	0.80	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Kalahari Desert (cont.)									
Date: 1/18/85	$\vartheta_o = 72(\text{AM})$	$\varphi = 38, 219$		$14 < \text{lon} < 26$					
Total population	519	518	516	510	505	471	372	217	
Clear land	0.36	0.35	0.31	0.34	0.33	0.29	0.22	0.03	
Clear desert	0.21	0.21	0.20	0.18	0.14	0.09	0.01	0.00	
Partly cloudy	0.42	0.44	0.49	0.48	0.53	0.62	0.76	0.78	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.16	
Overcast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
Date: 1/19/85	$\vartheta_o = 51(\text{PM})$	$\varphi = 132, 313$		$21 < \text{lon} < 26$					
Total population	187	202	194	183	169	158	150	105	
Clear land	0.20	0.21	0.22	0.21	0.20	0.17	0.16	0.08	
Clear desert	0.73	0.70	0.72	0.72	0.73	0.70	0.71	0.44	
Partly cloudy	0.07	0.08	0.06	0.08	0.08	0.13	0.13	0.49	
Date: 1/20/85	$\vartheta_o = 50(\text{PM})$	$\varphi = 133, 313$		$17 < \text{lon} < 21$					
Total population	167	185	178	168	158	155	140	100	
Clear land	0.19	0.18	0.17	0.17	0.18	0.14	0.19	0.11	
Clear desert	0.49	0.49	0.49	0.51	0.51	0.54	0.53	0.18	
Partly cloudy	0.24	0.25	0.26	0.24	0.23	0.26	0.21	0.59	
Mostly cloudy	0.09	0.08	0.08	0.09	0.08	0.06	0.08	0.12	
Date: 1/21/85	$\vartheta_o = 51(\text{PM})$	$\varphi = 135, 316$		$14 < \text{lon} < 18$					
Total population	97	96	96	94	95	95	81	61	
Clear land	0.15	0.18	0.15	0.12	0.11	0.01	0.00	0.00	
Clear desert	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	
Partly cloudy	0.27	0.26	0.28	0.31	0.31	0.40	0.42	0.02	
Mostly cloudy	0.09	0.09	0.11	0.15	0.14	0.22	0.21	0.56	
Overcast	0.48	0.47	0.46	0.43	0.45	0.36	0.37	0.43	
Date: 1/21/85	$\vartheta_o = 84(\text{AM})$	$\varphi = 34, 214$		$16 < \text{lon} < 26$					
Total population	280	272	282	278	279	261	223	104	
Clear land	0.08	0.09	0.07	0.06	0.04	0.03	0.06	0.01	
Clear desert	0.51	0.51	0.50	0.47	0.46	0.33	0.32	0.16	
Partly cloudy	0.21	0.22	0.20	0.23	0.28	0.43	0.41	0.51	
Mostly cloudy	0.17	0.14	0.20	0.21	0.20	0.18	0.10	0.06	
Overcast	0.03	0.04	0.04	0.03	0.03	0.03	0.11	0.26	
Date: 1/22/85	$\vartheta_o = 38(\text{PM})$	$\varphi = 123, 303$		$23 < \text{lon} < 26$					
Total population	124	116	111	112	106	93	81	58	
Partly cloudy	0.45	0.47	0.43	0.45	0.39	0.30	0.09	0.02	
Mostly cloudy	0.18	0.19	0.23	0.21	0.27	0.35	0.64	0.95	
Overcast	0.37	0.34	0.34	0.35	0.34	0.34	0.27	0.03	
Date: 1/22/85	$\vartheta_o = 84(\text{AM})$	$\varphi = 32, 213$		$16 < \text{lon} < 21$					
Total population	24	29	25	25	29	25	17	0	
Clear desert	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	
Partly cloudy	0.21	0.38	0.56	0.32	0.24	0.04	0.00	0.00	
Mostly cloudy	0.79	0.59	0.44	0.68	0.76	0.96	1.00	0.00	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Kalahari Desert (cont.)									
Date: 1/23/85	$\vartheta_o = 36(\text{PM})$	$\varphi = 123, 304$		$18 < \text{lon} < 22$					
Total population	160	161	161	160	154	144	121	89	
Clear desert	0.72	0.70	0.70	0.69	0.65	0.57	0.44	0.15	
Partly cloudy	0.17	0.17	0.18	0.20	0.21	0.27	0.36	0.45	
Mostly cloudy	0.06	0.07	0.07	0.08	0.08	0.10	0.18	0.30	
Overcast	0.04	0.05	0.05	0.04	0.06	0.06	0.02	0.10	
Date: 1/24/85	$\vartheta_o = 36(\text{PM})$	$\varphi = 130, 311$		$15 < \text{lon} < 19$					
Total population	171	161	156	150	138	125	98	65	
Partly cloudy	0.02	0.04	0.08	0.08	0.09	0.10	0.06	0.02	
Mostly cloudy	0.21	0.25	0.22	0.19	0.20	0.13	0.10	0.17	
Overcast	0.77	0.70	0.70	0.73	0.71	0.77	0.84	0.82	
Date: 1/24/85	$\vartheta_o = 95(\text{AM})$	$\varphi = 28, 209$		$22 < \text{lon} < 26$					
Total population	122	122	128	119	117	116	97	62	
Partly cloudy	0.32	0.33	0.34	0.24	0.27	0.20	0.35	0.29	
Mostly cloudy	0.54	0.48	0.45	0.56	0.51	0.59	0.45	0.44	
Overcast	0.14	0.20	0.21	0.20	0.21	0.21	0.20	0.27	
Date: 1/25/85	$\vartheta_o = 25(\text{PM})$	$\varphi = 107, 289$		$24 < \text{lon} < 26$					
Total population	45	47	46	44	43	36	37	25	
Clear desert	0.00	0.00	0.00	0.05	0.09	0.11	0.14	0.04	
Partly cloudy	0.93	0.91	0.93	0.89	0.91	0.89	0.86	0.96	
Mostly cloudy	0.07	0.09	0.07	0.07	0.00	0.00	0.00	0.00	
Date: 1/25/85	$\vartheta_o = 98(\text{AM})$	$\varphi = 25, 206$		$16 < \text{lon} < 22$					
Total population	217	221	221	216	218	200	164	96	
Clear desert	0.84	0.81	0.86	0.88	0.85	0.81	0.76	0.49	
Partly cloudy	0.16	0.19	0.14	0.13	0.15	0.19	0.24	0.51	
Date: 1/26/85	$\vartheta_o = 23(\text{PM})$	$\varphi = 110, 291$		$18 < \text{lon} < 23$					
Total population	167	177	179	171	152	159	142	103	
Clear desert	0.10	0.06	0.09	0.04	0.02	0.01	0.00	0.00	
Partly cloudy	0.24	0.27	0.26	0.27	0.30	0.33	0.30	0.29	
Mostly cloudy	0.35	0.36	0.35	0.46	0.47	0.44	0.54	0.65	
Overcast	0.31	0.32	0.30	0.23	0.21	0.22	0.15	0.06	
Date: 1/27/85	$\vartheta_o = 22(\text{PM})$	$\varphi = 121, 302$		$15 < \text{lon} < 20$					
Total population	116	117	122	116	103	102	91	74	
Partly cloudy	0.26	0.21	0.19	0.09	0.02	0.00	0.00	0.00	
Mostly cloudy	0.50	0.53	0.55	0.57	0.65	0.78	0.70	0.47	
Overcast	0.24	0.26	0.26	0.34	0.33	0.22	0.30	0.53	
Date: 1/27/85	$\vartheta_o = 108(\text{AM})$	$\varphi = 21, 201$		$24 < \text{lon} < 26$					
Total population	52	50	52	51	48	40	45	30	
Partly cloudy	0.58	0.50	0.54	0.53	0.56	0.63	0.64	0.40	
Mostly cloudy	0.31	0.42	0.38	0.41	0.42	0.38	0.36	0.60	
Overcast	0.12	0.08	0.08	0.06	0.02	0.00	0.00	0.00	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg						
		0	10	20	30	40	50	60
		10	20	30	40	50	60	70
								80
Kalahari Desert (conc.)								
Date: 1/28/85	$\vartheta_o = 112(\text{AM})$	$\varphi = 18, 199$		$14 < \text{lon} < 23$				
Total population	360	351	370	349	362	336	285	190
Clear desert	0.44	0.47	0.50	0.49	0.54	0.57	0.58	0.23
Partly cloudy	0.41	0.39	0.35	0.34	0.30	0.24	0.29	0.56
Mostly cloudy	0.04	0.03	0.05	0.08	0.08	0.11	0.07	0.12
Overcast	0.11	0.11	0.10	0.09	0.08	0.08	0.07	0.09
Sahara Desert								
Date: 1/17/85	$\vartheta_o = 112(\text{AM})$	$\varphi = 40, 220$		$17 < \text{lon} < 30$				
Total population	520	530	541	516	506	510	422	268
Clear desert	0.54	0.53	0.51	0.48	0.48	0.37	0.22	0.05
Partly cloudy	0.16	0.17	0.18	0.18	0.18	0.25	0.39	0.29
Mostly cloudy	0.18	0.18	0.19	0.20	0.20	0.20	0.24	0.49
Overcast	0.11	0.12	0.12	0.13	0.14	0.18	0.15	0.17
Date: 1/17/85	$\vartheta_o = 113(\text{AM})$	$\varphi = 40, 220$		$-5 < \text{lon} < 4$				
Total population	400	400	408	397	390	379	307	194
Clear desert	0.60	0.59	0.58	0.58	0.58	0.53	0.52	0.10
Partly cloudy	0.40	0.41	0.42	0.42	0.42	0.47	0.48	0.86
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Date: 1/17/85	$\vartheta_o = 109(\text{PM})$	$\varphi = 141, 322$		$17 < \text{lon} < 30$				
Total population	559	559	567	553	560	558	426	282
Clear desert	0.73	0.73	0.72	0.67	0.64	0.55	0.40	0.18
Partly cloudy	0.10	0.09	0.11	0.16	0.21	0.25	0.33	0.36
Mostly cloudy	0.11	0.13	0.13	0.11	0.10	0.15	0.22	0.35
Overcast	0.06	0.05	0.05	0.06	0.06	0.05	0.05	0.12
Date: 1/17/85	$\vartheta_o = 110(\text{PM})$	$\varphi = 141, 321$		$-5 < \text{lon} < 8$				
Total population	526	527	520	527	521	521	393	254
Clear desert	0.95	0.95	0.96	0.96	0.97	0.97	1.00	0.40
Partly cloudy	0.05	0.05	0.04	0.04	0.03	0.03	0.00	0.58
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Date: 1/18/85	$\vartheta_o = 118(\text{AM})$	$\varphi = 46, 225$		$7 < \text{lon} < 22$				
Total population	661	660	661	664	666	665	505	342
Clear desert	0.50	0.48	0.45	0.43	0.45	0.38	0.35	0.15
Partly cloudy	0.47	0.48	0.49	0.48	0.44	0.44	0.43	0.56
Mostly cloudy	0.03	0.04	0.06	0.09	0.11	0.18	0.22	0.29
Overcast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Date: 1/18/85	$\vartheta_o = 117(\text{AM})$	$\varphi = 41, 222$		$-14 < \text{lon} < -2$				
Total population	279	283	288	277	270	263	232	149
Clear desert	1.00	1.00	1.00	1.00	1.00	0.98	0.95	0.32
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.58
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.10

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahara Desert (cont.)									
Date: 1/18/85	$\vartheta_o = 105(\text{PM})$	$\varphi = 132, 311$		$8 < \text{lon} < 22$					
Total population	584	582	584	586	588	577	457	300	
Clear desert	0.74	0.72	0.69	0.65	0.64	0.58	0.51	0.23	
Partly cloudy	0.26	0.28	0.31	0.35	0.35	0.39	0.45	0.66	
Mostly cloudy	0.00	0.00	0.00	0.00	0.01	0.04	0.04	0.11	
Date: 1/18/85	$\vartheta_o = 104(\text{PM})$	$\varphi = 143, 322$		$-14 < \text{lon} < -2$					
Total population	279	279	285	276	285	285	210	138	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	
Date: 1/19/85	$\vartheta_o = 123(\text{AM})$	$\varphi = 45, 224$		$20 < \text{lon} < 35$					
Total population	404	407	400	402	402	401	302	191	
Clear desert	0.52	0.51	0.50	0.48	0.45	0.42	0.38	0.23	
Partly cloudy	0.15	0.17	0.19	0.19	0.20	0.19	0.18	0.20	
Mostly cloudy	0.23	0.23	0.24	0.27	0.24	0.22	0.31	0.37	
Overcast	0.10	0.09	0.08	0.07	0.11	0.17	0.13	0.20	
Date: 1/19/85	$\vartheta_o = 122(\text{AM})$	$\varphi = 43, 224$		$0 < \text{lon} < 15$					
Total population	561	562	560	560	561	560	423	281	
Clear desert	0.63	0.62	0.59	0.56	0.63	0.61	0.63	0.21	
Partly cloudy	0.37	0.38	0.41	0.44	0.37	0.39	0.37	0.79	
Date: 1/19/85	$\vartheta_o = 119(\text{AM})$	$\varphi = 41, 222$		$-15 < \text{lon} < -10$					
Total population	71	74	72	71	72	73	55	35	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	
Date: 1/19/85	$\vartheta_o = 97(\text{PM})$	$\varphi = 144, 324$		$25 < \text{lon} < 35$					
Total population	314	311	316	314	314	313	236	160	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
Date: 1/19/85	$\vartheta_o = 101(\text{PM})$	$\varphi = 144, 324$		$0 < \text{lon} < 20$					
Total population	483	486	488	478	476	473	373	249	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.84	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
Date: 1/20/85	$\vartheta_o = 125(\text{AM})$	$\varphi = 45, 224$		$18 < \text{lon} < 32$					
Total population	519	517	521	520	518	520	390	262	
Clear desert	0.89	0.88	0.87	0.85	0.86	0.82	0.84	0.51	
Partly cloudy	0.11	0.12	0.13	0.15	0.14	0.18	0.16	0.49	
Date: 1/20/85	$\vartheta_o = 126(\text{AM})$	$\varphi = 45, 224$		$-6 < \text{lon} < 8$					
Total population	400	402	404	405	406	410	313	214	
Clear desert	0.97	0.97	0.96	0.96	0.95	0.92	0.90	0.67	
Partly cloudy	0.03	0.03	0.04	0.04	0.05	0.08	0.10	0.31	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahara Desert (cont.)									
Date: 1/20/85	ϑ_o =96(PM)	φ =146, 325		18 < lon < 32					
Total population	558	556	556	555	553	549	401	250	
Clear desert	0.87	0.87	0.85	0.82	0.79	0.77	0.76	0.66	
Partly cloudy	0.09	0.09	0.08	0.12	0.15	0.12	0.20	0.31	
Mostly cloudy	0.04	0.05	0.07	0.06	0.06	0.11	0.04	0.04	
Date: 1/20/85	ϑ_o =98(PM)	φ =146, 325		-6 < lon < 12					
Total population	566	565	565	567	566	566	411	270	
Clear desert	1.00	1.00	1.00	1.00	1.00	0.99	1.00	0.74	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.26	
Date: 1/21/85	ϑ_o =131(AM)	φ = 48, 227		8 < lon < 24					
Total population	645	643	655	640	643	632	490	317	
Clear desert	1.00	0.99	0.99	0.99	1.00	0.98	1.00	0.62	
Partly cloudy	0.00	0.01	0.01	0.01	0.00	0.02	0.00	0.38	
Date: 1/21/85	ϑ_o =130(AM)	φ = 46, 225		-12 < lon < 0					
Total population	319	318	320	320	319	315	233	151	
Clear desert	0.19	0.18	0.17	0.12	0.12	0.01	0.00	0.00	
Partly cloudy	0.22	0.21	0.19	0.23	0.21	0.29	0.24	0.05	
Mostly cloudy	0.19	0.21	0.24	0.26	0.22	0.17	0.30	0.44	
Overcast	0.39	0.39	0.40	0.39	0.45	0.53	0.46	0.51	
Date: 1/21/85	ϑ_o =91(PM)	φ =148, 327		10 < lon < 24					
Total population	561	577	569	557	538	522	414	223	
Clear desert	0.91	0.93	0.89	0.80	0.81	0.77	0.87	0.82	
Partly cloudy	0.09	0.07	0.11	0.18	0.17	0.07	0.05	0.17	
Mostly cloudy	0.00	0.00	0.00	0.01	0.00	0.16	0.07	0.01	
Overcast	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	
Date: 1/21/85	ϑ_o =91(PM)	φ =148, 327		-12 < lon < 0					
Total population	340	342	344	345	342	339	237	129	
Clear desert	0.48	0.48	0.47	0.43	0.32	0.29	0.27	0.21	
Partly cloudy	0.15	0.15	0.17	0.19	0.28	0.28	0.27	0.16	
Mostly cloudy	0.11	0.13	0.10	0.12	0.12	0.11	0.14	0.19	
Overcast	0.26	0.24	0.26	0.27	0.28	0.31	0.32	0.43	
Date: 1/22/85	ϑ_o =137(AM)	φ = 53, 230		25 < lon < 35					
Total population	279	275	274	274	258	263	216	136	
Clear desert	0.99	0.99	0.99	0.97	0.97	0.97	1.00	0.88	
Partly cloudy	0.01	0.01	0.01	0.03	0.03	0.03	0.00	0.12	
Date: 1/22/85	ϑ_o =135(AM)	φ = 49, 228		0 < lon < 20					
Total population	566	576	578	556	533	527	446	282	
Clear desert	0.60	0.58	0.59	0.57	0.54	0.48	0.50	0.27	
Partly cloudy	0.15	0.15	0.13	0.13	0.15	0.13	0.12	0.26	
Mostly cloudy	0.25	0.26	0.26	0.27	0.27	0.24	0.24	0.22	
Overcast	0.01	0.02	0.02	0.02	0.04	0.14	0.15	0.25	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahara Desert (cont.)									
Date: 1/22/85	$\vartheta_o = 133(\text{AM})$	$\varphi = 47, 226$		$-15 < \text{lon} < -5$					
Total population		156	159	148	146	145	111	109	82
Clear desert		0.96	0.96	0.94	0.91	0.93	0.85	0.86	0.54
Partly cloudy		0.04	0.04	0.06	0.09	0.07	0.15	0.14	0.40
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Date: 1/22/85	$\vartheta_o = 83(\text{PM})$	$\varphi = 148, 328$		$25 < \text{lon} < 35$					
Total population		285	282	287	269	259	244	210	66
Clear desert		0.89	0.96	0.96	0.86	0.75	0.51	0.55	0.77
Partly cloudy		0.11	0.04	0.04	0.14	0.25	0.49	0.45	0.23
Date: 1/22/85	$\vartheta_o = 87(\text{PM})$	$\varphi = 149, 328$		$0 < \text{lon} < 20$					
Total population		534	544	548	528	522	495	360	189
Clear desert		0.19	0.19	0.19	0.16	0.14	0.10	0.06	0.01
Partly cloudy		0.26	0.25	0.24	0.24	0.26	0.21	0.28	0.15
Mostly cloudy		0.28	0.28	0.31	0.35	0.36	0.47	0.43	0.37
Overcast		0.28	0.27	0.26	0.25	0.24	0.22	0.24	0.48
Date: 1/23/85	$\vartheta_o = 139(\text{AM})$	$\varphi = 51, 229$		$20 < \text{lon} < 32$					
Total population		552	560	561	546	518	507	434	275
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.77
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
Date: 1/23/85	$\vartheta_o = 139(\text{AM})$	$\varphi = 50, 229$		$-4 < \text{lon} < 8$					
Total population		480	484	485	472	456	445	365	224
Clear desert		0.91	0.91	0.87	0.87	0.87	0.83	0.75	0.27
Partly cloudy		0.08	0.09	0.11	0.10	0.11	0.15	0.24	0.69
Mostly cloudy		0.01	0.00	0.01	0.03	0.03	0.02	0.01	0.04
Date: 1/23/85	$\vartheta_o = 82(\text{PM})$	$\varphi = 151, 330$		$20 < \text{lon} < 32$					
Total population		521	541	525	514	500	490	355	119
Clear desert		0.99	0.99	0.99	0.96	0.88	0.56	0.60	0.84
Partly cloudy		0.01	0.01	0.01	0.04	0.12	0.44	0.40	0.16
Date: 1/23/85	$\vartheta_o = 85(\text{PM})$	$\varphi = 152, 331$		$-4 < \text{lon} < 12$					
Total population		564	569	572	560	556	551	367	162
Clear desert		0.73	0.74	0.70	0.62	0.55	0.47	0.57	0.49
Partly cloudy		0.26	0.24	0.26	0.29	0.29	0.30	0.29	0.33
Mostly cloudy		0.01	0.02	0.04	0.09	0.17	0.23	0.14	0.18
Date: 1/24/85	$\vartheta_o = 144(\text{AM})$	$\varphi = 54, 233$		$10 < \text{lon} < 26$					
Total population		603	618	610	590	559	547	467	323
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.76
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahara Desert (cont.)									
Date: 1/24/85	$\vartheta_o = 143(\text{AM})$	$\varphi = 52, 230$		$-10 < \text{lon} < 0$					
Total population	331	323	323	313	304	295	264	160	
Clear desert	0.63	0.64	0.61	0.53	0.50	0.45	0.43	0.27	
Partly cloudy	0.16	0.16	0.18	0.25	0.26	0.29	0.37	0.44	
Mostly cloudy	0.13	0.13	0.17	0.21	0.24	0.26	0.20	0.29	
Overcast	0.08	0.07	0.04	0.01	0.00	0.00	0.00	0.00	
Date: 1/24/85	$\vartheta_o = 79(\text{PM})$	$\varphi = 153, 332$		$12 < \text{lon} < 26$					
Total population	560	568	570	554	551	531	400	147	
Clear desert	0.98	1.00	0.98	0.90	0.78	0.54	0.61	0.56	
Partly cloudy	0.02	0.00	0.02	0.10	0.22	0.46	0.40	0.44	
Date: 1/24/85	$\vartheta_o = 79(\text{PM})$	$\varphi = 154, 333$		$-10 < \text{lon} < 4$					
Total population	360	362	361	362	359	361	244	92	
Clear desert	0.97	0.94	0.93	0.90	0.86	0.68	0.77	0.63	
Partly cloudy	0.01	0.02	0.04	0.07	0.13	0.31	0.23	0.32	
Mostly cloudy	0.03	0.04	0.03	0.03	0.01	0.01	0.00	0.05	
Date: 1/25/85	$\vartheta_o = 151(\text{AM})$	$\varphi = 64, 243$		$25 < \text{lon} < 35$					
Total population	51	55	53	56	62	73	68	50	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	
Date: 1/25/85	$\vartheta_o = 148(\text{AM})$	$\varphi = 56, 235$		$0 < \text{lon} < 20$					
Total population	575	578	589	568	564	564	460	297	
Clear desert	0.52	0.51	0.53	0.51	0.49	0.42	0.40	0.19	
Partly cloudy	0.16	0.16	0.12	0.12	0.13	0.19	0.18	0.32	
Mostly cloudy	0.30	0.32	0.35	0.35	0.35	0.36	0.41	0.43	
Overcast	0.02	0.01	0.01	0.02	0.03	0.03	0.01	0.06	
Date: 1/25/85	$\vartheta_o = 147(\text{AM})$	$\varphi = 52, 231$		$-15 < \text{lon} < -5$					
Total population	160	163	163	156	150	149	128	81	
Clear desert	0.87	0.88	0.88	0.85	0.84	0.81	0.72	0.32	
Partly cloudy	0.07	0.09	0.06	0.07	0.08	0.11	0.16	0.47	
Mostly cloudy	0.03	0.02	0.02	0.04	0.05	0.07	0.12	0.21	
Overcast	0.04	0.02	0.04	0.04	0.03	0.01	0.00	0.00	
Date: 1/25/85	$\vartheta_o = 70(\text{PM})$	$\varphi = 154, 334$		$25 < \text{lon} < 35$					
Total population	174	176	175	173	174	169	131	56	
Clear desert	1.00	1.00	1.00	0.96	0.96	0.81	0.87	0.93	
Partly cloudy	0.00	0.00	0.00	0.03	0.04	0.19	0.13	0.07	
Mostly cloudy	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	
Date: 1/25/85	$\vartheta_o = 74(\text{PM})$	$\varphi = 156, 335$		$0 < \text{lon} < 20$					
Total population	561	561	560	560	562	557	351	165	
Clear desert	0.53	0.50	0.46	0.38	0.30	0.19	0.09	0.01	
Partly cloudy	0.17	0.18	0.18	0.24	0.30	0.40	0.48	0.18	
Mostly cloudy	0.29	0.27	0.30	0.35	0.35	0.36	0.37	0.59	
Overcast	0.01	0.05	0.05	0.03	0.05	0.06	0.05	0.22	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahara Desert (cont.)									
Date: 1/25/85	$\vartheta_o = 74(\text{PM})$	$\varphi = 156, 335$		$-15 < \text{lon} < -5$					
Total population	30	36	40	66	82	106	89	60	
Clear desert	1.00	1.00	0.98	0.91	0.91	0.71	0.72	0.25	
Partly cloudy	0.00	0.00	0.03	0.06	0.09	0.29	0.24	0.58	
Mostly cloudy	0.00	0.00	0.00	0.03	0.00	0.00	0.04	0.17	
Date: 1/26/85	$\vartheta_o = 152(\text{AM})$	$\varphi = 59, 238$		$20 < \text{lon} < 35$					
Total population	546	548	548	547	543	543	402	266	
Clear desert	0.49	0.49	0.48	0.46	0.46	0.44	0.41	0.27	
Partly cloudy	0.17	0.16	0.15	0.14	0.13	0.11	0.12	0.18	
Mostly cloudy	0.07	0.08	0.14	0.16	0.16	0.17	0.22	0.24	
Overcast	0.27	0.27	0.23	0.24	0.26	0.27	0.24	0.31	
Date: 1/26/85	$\vartheta_o = 152(\text{AM})$	$\varphi = 56, 236$		$-2 < \text{lon} < 10$					
Total population	478	478	475	478	478	480	357	244	
Clear desert	0.78	0.78	0.77	0.75	0.75	0.72	0.65	0.39	
Partly cloudy	0.21	0.22	0.23	0.24	0.25	0.28	0.34	0.59	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	
Date: 1/26/85	$\vartheta_o = 69(\text{PM})$	$\varphi = 158, 337$		$20 < \text{lon} < 32$					
Total population	479	479	480	479	483	485	341	162	
Clear desert	0.52	0.51	0.50	0.45	0.43	0.38	0.38	0.35	
Partly cloudy	0.10	0.10	0.09	0.14	0.15	0.17	0.16	0.23	
Mostly cloudy	0.13	0.14	0.15	0.17	0.16	0.13	0.21	0.21	
Overcast	0.25	0.25	0.26	0.24	0.26	0.32	0.24	0.20	
Date: 1/26/85	$\vartheta_o = 72(\text{PM})$	$\varphi = 158, 337$		$-2 < \text{lon} < 12$					
Total population	566	567	562	562	565	565	374	158	
Clear desert	0.75	0.75	0.73	0.67	0.63	0.61	0.60	0.30	
Partly cloudy	0.08	0.09	0.11	0.17	0.17	0.18	0.18	0.41	
Mostly cloudy	0.14	0.14	0.13	0.15	0.19	0.21	0.22	0.14	
Overcast	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.15	
Date: 1/27/85	$\vartheta_o = 157(\text{AM})$	$\varphi = 62, 241$		$12 < \text{lon} < 26$					
Total population	561	560	561	561	560	563	424	282	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	
Date: 1/27/85	$\vartheta_o = 157(\text{AM})$	$\varphi = 59, 238$		$-10 < \text{lon} < 2$					
Total population	318	319	319	319	320	319	243	160	
Clear desert	0.14	0.14	0.13	0.11	0.10	0.08	0.03	0.01	
Partly cloudy	0.28	0.27	0.27	0.27	0.24	0.18	0.18	0.09	
Mostly cloudy	0.38	0.41	0.40	0.43	0.40	0.44	0.53	0.55	
Overcast	0.20	0.19	0.20	0.20	0.26	0.30	0.26	0.36	
Date: 1/27/85	$\vartheta_o = 66(\text{PM})$	$\varphi = 161, 340$		$12 < \text{lon} < 26$					
Total population	560	560	560	561	560	561	396	208	
Clear desert	1.00	1.00	1.00	1.00	0.94	0.71	0.73	0.43	
Partly cloudy	0.00	0.00	0.00	0.00	0.06	0.29	0.27	0.54	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg						
		0	10	20	30	40	50	60
		10	20	30	40	50	60	70
								80
Sahara Desert (conc.)								
Date: 1/27/85	$\vartheta_o = 67(\text{PM})$	$\varphi = 161, 340$		$-10 < \text{lon} < 4$				
Total population	393	390	393	393	391	392	282	150
Clear desert	0.49	0.48	0.48	0.45	0.43	0.39	0.30	0.10
Partly cloudy	0.12	0.14	0.16	0.21	0.21	0.24	0.30	0.29
Mostly cloudy	0.11	0.11	0.10	0.10	0.12	0.13	0.17	0.25
Overcast	0.27	0.27	0.26	0.25	0.24	0.24	0.23	0.35
Date: 1/28/85	$\vartheta_o = 162(\text{AM})$	$\varphi = 71, 248$		$0 < \text{lon} < 20$				
Total population	641	641	642	642	683	684	550	366
Clear desert	0.93	0.92	0.90	0.89	0.88	0.84	0.83	0.53
Partly cloudy	0.04	0.05	0.07	0.07	0.09	0.12	0.14	0.42
Mostly cloudy	0.03	0.02	0.03	0.03	0.03	0.04	0.04	0.05
Overcast	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Date: 1/28/85	$\vartheta_o = 161(\text{AM})$	$\varphi = 62, 239$		$-15 < \text{lon} < -5$				
Total population	193	190	193	193	193	193	143	99
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.45
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.53
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Date: 1/28/85	$\vartheta_o = 58(\text{PM})$	$\varphi = 163, 342$		$25 < \text{lon} < 35$				
Total population	41	41	42	42	47	50	42	34
Clear desert	1.00	1.00	1.00	1.00	1.00	0.90	0.88	0.56
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.10	0.12	0.44
Date: 1/28/85	$\vartheta_o = 62(\text{PM})$	$\varphi = 164, 342$		$0 < \text{lon} < 25$				
Total population	560	560	560	560	561	559	415	241
Clear desert	0.92	0.92	0.91	0.84	0.73	0.64	0.49	0.14
Partly cloudy	0.03	0.03	0.04	0.08	0.23	0.35	0.51	0.85
Mostly cloudy	0.05	0.04	0.04	0.08	0.03	0.02	0.00	0.01
Arabian peninsula								
Date: 1/17/85	$\vartheta_o = 107(\text{PM})$	$\varphi = 142, 321$		$44 < \text{lon} < 50$				
Total population	262	263	264	261	261	261	199	137
Clear land	0.12	0.10	0.09	0.08	0.10	0.07	0.05	0.00
Clear desert	0.79	0.78	0.79	0.81	0.82	0.83	0.84	0.71
Partly cloudy	0.10	0.12	0.12	0.11	0.09	0.10	0.11	0.29
Date: 1/17/85	$\vartheta_o = 115(\text{AM})$	$\varphi = 41, 221$		$39 < \text{lon} < 52$				
Total population	645	646	646	639	640	641	489	319
Clear desert	0.86	0.85	0.85	0.84	0.82	0.72	0.65	0.37
Partly cloudy	0.11	0.11	0.11	0.12	0.13	0.24	0.29	0.46
Mostly cloudy	0.04	0.04	0.04	0.04	0.04	0.05	0.06	0.17

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Arabian peninsula (cont.)									
Date: 1/18/85	$\vartheta_o = 107(\text{PM})$	$\varphi = 141, 323$		$39 < \text{lon} < 47$					
Total population		215	220	219	210	198	202	150	95
Clear desert		0.18	0.20	0.16	0.14	0.15	0.08	0.00	0.00
Partly cloudy		0.20	0.18	0.16	0.17	0.12	0.11	0.08	0.00
Mostly cloudy		0.17	0.15	0.16	0.16	0.19	0.20	0.22	0.11
Overcast		0.45	0.46	0.52	0.53	0.55	0.61	0.70	0.89
Date: 1/18/85	$\vartheta_o = 118(\text{AM})$	$\varphi = 42, 222$		$36 < \text{lon} < 48$					
Total population		101	103	107	101	104	118	103	71
Clear desert		0.58	0.60	0.57	0.50	0.45	0.43	0.36	0.13
Partly cloudy		0.04	0.04	0.05	0.12	0.13	0.09	0.07	0.21
Mostly cloudy		0.31	0.30	0.33	0.34	0.34	0.40	0.49	0.41
Overcast		0.07	0.06	0.06	0.05	0.08	0.08	0.09	0.25
Date: 1/19/85	$\vartheta_o = 108(\text{PM})$	$\varphi = 142, 322$		$36 < \text{lon} < 44$					
Total population		257	259	254	256	257	255	188	121
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Date: 1/19/85	$\vartheta_o = 98(\text{PM})$	$\varphi = 144, 325$		$50 < \text{lon} < 56$					
Total population		146	143	144	143	137	130	90	58
Clear desert		0.84	0.80	0.78	0.78	0.78	0.75	0.70	0.62
Partly cloudy		0.13	0.14	0.15	0.09	0.07	0.12	0.23	0.34
Mostly cloudy		0.03	0.06	0.07	0.13	0.15	0.13	0.07	0.03
Date: 1/20/85	$\vartheta_o = 93(\text{PM})$	$\varphi = 146, 326$		$43 < \text{lon} < 50$					
Total population		317	316	320	316	311	311	217	135
Clear land		0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.04
Clear desert		1.00	1.00	1.00	0.99	0.94	0.92	0.93	0.96
Partly cloudy		0.00	0.00	0.00	0.00	0.04	0.01	0.02	0.00
Mostly cloudy		0.00	0.00	0.00	0.01	0.02	0.07	0.02	0.00
Date: 1/20/85	$\vartheta_o = 128(\text{AM})$	$\varphi = 48, 226$		$38 < \text{lon} < 54$					
Total population		617	620	618	616	613	608	452	294
Clear desert		0.96	0.96	0.96	0.94	0.93	0.92	0.92	0.74
Partly cloudy		0.04	0.04	0.04	0.06	0.07	0.08	0.08	0.22
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Date: 1/21/85	$\vartheta_o = 95(\text{PM})$	$\varphi = 148, 326$		$40 < \text{lon} < 48$					
Total population		315	318	319	315	316	309	247	168
Clear desert		0.37	0.36	0.34	0.34	0.34	0.31	0.25	0.15
Partly cloudy		0.20	0.19	0.17	0.14	0.10	0.12	0.17	0.16
Mostly cloudy		0.24	0.27	0.31	0.35	0.33	0.24	0.49	0.59
Overcast		0.18	0.18	0.18	0.17	0.23	0.33	0.10	0.10
Date: 1/21/85	$\vartheta_o = 130(\text{AM})$	$\varphi = 47, 226$		$36 < \text{lon} < 48$					
Total population		487	486	484	487	491	487	361	233
Clear desert		0.78	0.79	0.80	0.78	0.77	0.73	0.70	0.53
Partly cloudy		0.20	0.19	0.19	0.19	0.21	0.26	0.30	0.44
Mostly cloudy		0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.03

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Arabian peninsula (cont.)									
Date: 1/22/85	ϑ_o =96(PM)	φ =149, 328		36 < lon < 44					
Total population	276	286	276	268	249	241	218	140	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.79	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
Date: 1/22/85	ϑ_o =141(AM)	φ = 55, 234		40 < lon < 55					
Total population	445	443	446	434	403	395	336	227	
Clear desert	0.98	0.98	0.96	0.95	0.95	0.91	0.87	0.65	
Partly cloudy	0.02	0.02	0.03	0.03	0.03	0.06	0.08	0.26	
Mostly cloudy	0.00	0.01	0.01	0.02	0.02	0.03	0.05	0.09	
Date: 1/23/85	ϑ_o =79(PM)	φ =151, 330		44 < lon < 52					
Total population	276	277	280	277	276	275	198	71	
Clear desert	0.92	0.92	0.92	0.87	0.80	0.52	0.55	0.24	
Partly cloudy	0.08	0.08	0.08	0.13	0.18	0.48	0.45	0.58	
Mostly cloudy	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.18	
Date: 1/23/85	ϑ_o =144(AM)	φ = 54, 234		36 < lon < 49					
Total population	685	644	638	632	611	480	444	280	
Clear desert	0.76	0.76	0.75	0.73	0.71	0.60	0.55	0.32	
Partly cloudy	0.18	0.18	0.19	0.20	0.22	0.32	0.40	0.45	
Mostly cloudy	0.03	0.04	0.04	0.06	0.06	0.06	0.05	0.23	
Overcast	0.03	0.02	0.01	0.01	0.01	0.02	0.00	0.00	
Date: 1/24/85	ϑ_o =81(PM)	φ =153, 332		40 < lon < 47					
Total population	303	333	304	300	267	270	169	88	
Partly cloudy	0.04	0.04	0.02	0.01	0.00	0.00	0.00	0.00	
Mostly cloudy	0.38	0.33	0.33	0.38	0.32	0.24	0.30	0.25	
Overcast	0.57	0.63	0.64	0.60	0.68	0.76	0.70	0.75	
Date: 1/25/85	ϑ_o =82(PM)	φ =156, 335		36 < lon < 43					
Total population	238	239	237	235	236	236	162	53	
Clear desert	0.92	0.94	0.95	0.94	0.94	0.74	0.80	0.64	
Partly cloudy	0.08	0.06	0.05	0.06	0.06	0.26	0.20	0.30	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	
Date: 1/25/85	ϑ_o =153(AM)	φ = 62, 243		42 < lon < 56					
Total population	262	262	268	269	266	265	197	133	
Clear desert	0.12	0.12	0.12	0.11	0.11	0.09	0.10	0.04	
Partly cloudy	0.39	0.38	0.36	0.37	0.34	0.21	0.09	0.10	
Mostly cloudy	0.31	0.31	0.35	0.37	0.39	0.52	0.64	0.65	
Overcast	0.19	0.20	0.17	0.15	0.16	0.17	0.16	0.21	
Date: 1/26/85	ϑ_o =67(PM)	φ =157, 337		45 < lon < 53					
Total population	275	277	275	276	278	277	210	108	
Clear desert	0.48	0.43	0.35	0.26	0.19	0.04	0.00	0.00	
Partly cloudy	0.00	0.06	0.13	0.18	0.18	0.27	0.34	0.33	
Mostly cloudy	0.10	0.09	0.10	0.14	0.21	0.26	0.43	0.30	
Overcast	0.42	0.42	0.41	0.41	0.41	0.43	0.23	0.37	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg						
		0	10	20	30	40	50	60
		10	20	30	40	50	60	70
								80
Arabian peninsula (conc.)								
Date: 1/26/85	$\vartheta_o = 157(\text{AM})$	$\varphi = 65, 242$		$36 < \text{lon} < 50$				
Total population	517	515	517	517	533	564	435	290
Clear desert	0.81	0.79	0.79	0.81	0.78	0.71	0.68	0.46
Partly cloudy	0.13	0.14	0.14	0.14	0.16	0.16	0.13	0.28
Mostly cloudy	0.06	0.06	0.07	0.05	0.06	0.13	0.20	0.24
Overcast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Date: 1/27/85	$\vartheta_o = 67(\text{PM})$	$\varphi = 161, 340$		$41 < \text{lon} < 47$				
Total population	267	268	267	264	264	261	172	67
Clear desert	0.69	0.63	0.60	0.46	0.38	0.25	0.19	0.00
Partly cloudy	0.15	0.21	0.28	0.46	0.58	0.73	0.75	0.42
Mostly cloudy	0.16	0.16	0.12	0.08	0.05	0.02	0.06	0.58
Date: 1/28/85	$\vartheta_o = 70(\text{PM})$	$\varphi = 165, 343$		$38 < \text{lon} < 45$				
Total population	234	235	233	232	232	231	143	63
Clear desert	0.26	0.26	0.29	0.21	0.05	0.01	0.00	0.00
Partly cloudy	0.04	0.06	0.06	0.11	0.28	0.29	0.22	0.03
Mostly cloudy	0.25	0.23	0.21	0.25	0.25	0.26	0.35	0.40
Overcast	0.44	0.44	0.43	0.43	0.42	0.43	0.43	0.57
Sahel								
Date: 1/17/85	$\vartheta_o = 98(\text{PM})$	$\varphi = 143, 323$		$38 < \text{lon} < 41$				
Total population	102	101	106	101	101	100	69	45
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Date: 1/17/85	$\vartheta_o = 99(\text{PM})$	$\varphi = 143, 323$		$13 < \text{lon} < 20$				
Total population	234	235	233	232	232	231	172	115
Clear land	0.83	0.83	0.83	0.83	0.83	0.83	0.81	0.37
Clear desert	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.12
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.50
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Date: 1/17/85	$\vartheta_o = 100(\text{PM})$	$\varphi = 143, 323$		$-11 < \text{lon} < -3$				
Total population	311	312	316	309	312	310	243	165
Clear desert	0.13	0.11	0.10	0.09	0.09	0.12	0.09	0.00
Partly cloudy	0.57	0.56	0.57	0.56	0.50	0.40	0.38	0.28
Mostly cloudy	0.24	0.26	0.27	0.27	0.34	0.42	0.53	0.72
Overcast	0.06	0.07	0.05	0.08	0.07	0.06	0.00	0.00
Date: 1/17/85	$\vartheta_o = 103(\text{AM})$	$\varphi = 37, 217$		$27 < \text{lon} < 34$				
Total population	235	239	243	229	223	223	183	114
Clear land	0.42	0.40	0.38	0.38	0.42	0.36	0.38	0.01
Clear desert	0.17	0.16	0.17	0.17	0.16	0.15	0.15	0.11
Partly cloudy	0.40	0.44	0.44	0.45	0.42	0.48	0.47	0.89

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel (cont.)									
Date: 1/17/85	$\vartheta_o = 104(\text{AM})$	$\varphi = 38, 218$		$0 < \text{lon} < 10$					
Total population	311	314	312	312	313	309	238	155	
Clear desert	0.07	0.06	0.04	0.02	0.02	0.03	0.01	0.00	
Partly cloudy	0.75	0.73	0.73	0.71	0.70	0.70	0.81	0.65	
Mostly cloudy	0.13	0.18	0.21	0.25	0.28	0.28	0.18	0.35	
Overcast	0.05	0.04	0.03	0.02	0.00	0.00	0.00	0.00	
Date: 1/18/85	$\vartheta_o = 109(\text{AM})$	$\varphi = 39, 219$		$-8 < \text{lon} < 2$					
Total population	351	354	360	345	349	334	271	168	
Clear desert	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.00	
Partly cloudy	0.52	0.53	0.52	0.51	0.53	0.52	0.51	0.28	
Mostly cloudy	0.42	0.41	0.43	0.43	0.42	0.44	0.45	0.72	
Date: 1/18/85	$\vartheta_o = 108(\text{AM})$	$\varphi = 38, 218$		$18 < \text{lon} < 26$					
Total population	232	233	232	233	235	235	180	117	
Clear land	0.83	0.81	0.80	0.78	0.77	0.68	0.73	0.03	
Clear desert	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.11	
Partly cloudy	0.00	0.02	0.03	0.05	0.06	0.15	0.11	0.86	
Date: 1/18/85	$\vartheta_o = 98(\text{PM})$	$\varphi = 144, 323$		$-15 < \text{lon} < -10$					
Total population	203	199	197	187	186	185	146	97	
Clear land	0.22	0.22	0.19	0.14	0.19	0.10	0.02	0.00	
Clear desert	0.78	0.78	0.81	0.85	0.77	0.76	0.77	0.73	
Partly cloudy	0.00	0.00	0.00	0.01	0.03	0.14	0.21	0.25	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
Date: 1/18/85	$\vartheta_o = 95(\text{PM})$	$\varphi = 144, 324$		$5 < \text{lon} < 13$					
Total population	233	234	232	233	234	233	156	100	
Clear land	0.30	0.27	0.23	0.23	0.23	0.21	0.21	0.14	
Clear desert	0.16	0.17	0.17	0.17	0.17	0.17	0.19	0.00	
Partly cloudy	0.50	0.53	0.56	0.57	0.58	0.62	0.60	0.84	
Mostly cloudy	0.03	0.03	0.03	0.03	0.03	0.00	0.00	0.02	
Date: 1/18/85	$\vartheta_o = 96(\text{PM})$	$\varphi = 143, 324$		$30 < \text{lon} < 40$					
Total population	313	313	314	312	311	303	242	161	
Clear land	0.62	0.63	0.61	0.62	0.62	0.62	0.60	0.42	
Clear desert	0.38	0.37	0.39	0.38	0.38	0.38	0.40	0.38	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	
Date: 1/19/85	$\vartheta_o = 114(\text{AM})$	$\varphi = 40, 220$		$-15 < \text{lon} < -5$					
Total population	352	350	352	351	352	349	264	176	
Clear desert	0.45	0.44	0.45	0.45	0.45	0.45	0.45	0.41	
Partly cloudy	0.44	0.45	0.43	0.45	0.46	0.48	0.54	0.59	
Mostly cloudy	0.11	0.11	0.12	0.10	0.09	0.07	0.02	0.00	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel (cont.)									
Date: 1/19/85	$\vartheta_o = 112(\text{AM})$	$\varphi = 39, 219$		$0 < \text{lon} < 18$					
Total population		136	136	136	137	140	142	108	77
Clear land		0.71	0.69	0.65	0.66	0.66	0.56	0.45	0.00
Clear desert		0.29	0.28	0.29	0.29	0.28	0.27	0.25	0.16
Partly cloudy		0.00	0.03	0.06	0.05	0.06	0.16	0.30	0.79
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Date: 1/19/85	$\vartheta_o = 114(\text{AM})$	$\varphi = 40, 220$		$33 < \text{lon} < 41$					
Total population		364	361	361	358	354	349	252	158
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
Date: 1/19/85	$\vartheta_o = 91(\text{PM})$	$\varphi = 145, 324$		$-3 < \text{lon} < 5$					
Total population		311	310	318	309	308	301	224	119
Clear land		0.23	0.24	0.24	0.16	0.15	0.13	0.19	0.13
Clear desert		0.38	0.38	0.38	0.39	0.37	0.38	0.41	0.42
Partly cloudy		0.36	0.34	0.35	0.45	0.48	0.41	0.34	0.39
Mostly cloudy		0.04	0.04	0.03	0.01	0.00	0.08	0.06	0.06
Date: 1/19/85	$\vartheta_o = 90(\text{PM})$	$\varphi = 144, 324$		$22 < \text{lon} < 30$					
Total population		233	234	232	233	233	233	148	83
Clear land		0.51	0.61	0.73	0.58	0.61	0.61	0.63	0.39
Clear desert		0.16	0.16	0.16	0.17	0.17	0.17	0.19	0.23
Partly cloudy		0.33	0.23	0.11	0.24	0.21	0.04	0.09	0.37
Mostly cloudy		0.00	0.00	0.00	0.00	0.01	0.19	0.09	0.01
Date: 1/20/85	$\vartheta_o = 118(\text{AM})$	$\varphi = 41, 220$		$2 < \text{lon} < 10$					
Total population		312	311	308	308	306	301	223	145
Clear land		0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Clear desert		0.35	0.34	0.33	0.33	0.32	0.32	0.31	0.23
Partly cloudy		0.65	0.66	0.67	0.67	0.67	0.68	0.68	0.74
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Date: 1/20/85	$\vartheta_o = 117(\text{AM})$	$\varphi = 40, 220$		$27 < \text{lon} < 35$					
Total population		234	236	233	232	232	232	173	115
Clear land		0.77	0.75	0.74	0.74	0.73	0.66	0.69	0.08
Clear desert		0.17	0.17	0.17	0.18	0.16	0.17	0.16	0.18
Partly cloudy		0.06	0.08	0.09	0.09	0.11	0.17	0.15	0.74
Date: 1/20/85	$\vartheta_o = 86(\text{PM})$	$\varphi = 146, 325$		$-10 < \text{lon} < 0$					
Total population		311	312	312	312	313	311	178	79
Clear land		0.29	0.30	0.26	0.21	0.13	0.10	0.04	0.00
Clear desert		0.23	0.23	0.24	0.15	0.11	0.10	0.13	0.04
Partly cloudy		0.34	0.31	0.32	0.45	0.54	0.38	0.57	0.70
Mostly cloudy		0.04	0.05	0.07	0.08	0.13	0.35	0.23	0.27
Overcast		0.10	0.11	0.11	0.11	0.09	0.07	0.02	0.00

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel (cont.)									
Date: 1/20/85	$\vartheta_o = 86(\text{PM})$	$\varphi = 146, 326$		$14 < \text{lon} < 22$					
Total population	232	233	232	232	233	232	147	60	
Clear land	0.27	0.32	0.37	0.29	0.41	0.42	0.46	0.10	
Clear desert	0.17	0.17	0.17	0.17	0.10	0.08	0.10	0.08	
Partly cloudy	0.56	0.51	0.46	0.54	0.49	0.35	0.32	0.82	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.15	0.13	0.00	
Date: 1/21/85	$\vartheta_o = 123(\text{AM})$	$\varphi = 41, 221$		$-7 < \text{lon} < 2$					
Total population	312	311	312	311	311	317	241	164	
Clear land	0.10	0.07	0.06	0.08	0.08	0.06	0.05	0.00	
Clear desert	0.17	0.16	0.17	0.17	0.16	0.14	0.09	0.02	
Partly cloudy	0.60	0.63	0.63	0.60	0.60	0.62	0.66	0.65	
Mostly cloudy	0.08	0.08	0.10	0.08	0.10	0.12	0.15	0.23	
Overcast	0.05	0.05	0.04	0.07	0.06	0.07	0.06	0.10	
Date: 1/21/85	$\vartheta_o = 121(\text{AM})$	$\varphi = 41, 220$		$18 < \text{lon} < 27$					
Total population	233	233	232	233	236	233	176	119	
Clear land	0.41	0.33	0.31	0.28	0.28	0.17	0.16	0.00	
Clear desert	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.14	
Partly cloudy	0.42	0.51	0.52	0.55	0.55	0.65	0.66	0.83	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
Date: 1/21/85	$\vartheta_o = 84(\text{PM})$	$\varphi = 148, 327$		$-15 < \text{lon} < -8$					
Total population	236	234	239	240	244	244	181	68	
Clear land	0.13	0.15	0.13	0.11	0.06	0.01	0.00	0.00	
Clear desert	0.66	0.66	0.67	0.65	0.55	0.36	0.33	0.10	
Partly cloudy	0.11	0.11	0.10	0.12	0.24	0.42	0.45	0.40	
Mostly cloudy	0.08	0.09	0.10	0.12	0.13	0.16	0.17	0.29	
Overcast	0.02	0.00	0.00	0.01	0.02	0.05	0.04	0.21	
Date: 1/21/85	$\vartheta_o = 81(\text{PM})$	$\varphi = 147, 326$		$7 < \text{lon} < 15$					
Total population	236	239	243	226	222	217	191	60	
Clear land	0.14	0.16	0.15	0.15	0.22	0.29	0.15	0.00	
Clear desert	0.17	0.17	0.17	0.17	0.13	0.08	0.08	0.15	
Partly cloudy	0.69	0.67	0.68	0.68	0.65	0.62	0.76	0.75	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.10	
Date: 1/21/85	$\vartheta_o = 82(\text{PM})$	$\varphi = 148, 326$		$30 < \text{lon} < 38$					
Total population	291	294	300	290	283	283	228	65	
Clear land	0.42	0.41	0.41	0.42	0.35	0.19	0.18	0.29	
Clear desert	0.58	0.59	0.58	0.50	0.43	0.28	0.29	0.29	
Partly cloudy	0.00	0.00	0.01	0.08	0.23	0.52	0.53	0.42	
Date: 1/22/85	$\vartheta_o = 128(\text{AM})$	$\varphi = 42, 222$		$-13 < \text{lon} < -5$					
Total population	378	359	352	353	333	292	267	207	
Clear desert	0.42	0.41	0.41	0.41	0.41	0.40	0.38	0.28	
Partly cloudy	0.14	0.14	0.13	0.10	0.07	0.05	0.07	0.12	
Mostly cloudy	0.40	0.41	0.43	0.45	0.50	0.55	0.54	0.59	
Overcast	0.04	0.04	0.03	0.04	0.02	0.00	0.00	0.01	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel (cont.)									
Date: 1/22/85	$\vartheta_o = 126(\text{AM})$			$\varphi = 41, 221$	$12 < \text{lon} < 20$				
Total population		216	217	218	209	205	196	165	98
Clear land		0.74	0.71	0.69	0.70	0.69	0.64	0.58	0.02
Clear desert		0.18	0.18	0.18	0.18	0.18	0.19	0.18	0.18
Partly cloudy		0.08	0.12	0.13	0.12	0.13	0.17	0.24	0.80
Date: 1/22/85	$\vartheta_o = 128(\text{AM})$			$\varphi = 43, 222$	$35 < \text{lon} < 41$				
Total population		94	95	98	91	92	105	85	68
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Date: 1/22/85	$\vartheta_o = 77(\text{PM})$			$\varphi = 148, 328$	$-2 < \text{lon} < 6$				
Total population		263	271	266	252	247	242	202	79
Clear land		0.09	0.21	0.23	0.10	0.18	0.17	0.06	0.00
Clear desert		0.25	0.25	0.22	0.18	0.11	0.07	0.07	0.04
Partly cloudy		0.66	0.52	0.54	0.69	0.71	0.73	0.83	0.57
Mostly cloudy		0.00	0.01	0.02	0.02	0.00	0.03	0.04	0.39
Date: 1/22/85	$\vartheta_o = 77(\text{PM})$			$\varphi = 148, 327$	$23 < \text{lon} < 34$				
Total population		240	244	236	233	216	209	189	76
Clear land		0.08	0.12	0.10	0.17	0.39	0.37	0.40	0.07
Clear desert		0.17	0.16	0.17	0.17	0.10	0.08	0.10	0.20
Partly cloudy		0.75	0.72	0.74	0.67	0.50	0.56	0.50	0.74
Date: 1/23/85	$\vartheta_o = 131(\text{AM})$			$\varphi = 42, 221$	$4 < \text{lon} < 12$				
Total population		234	233	242	229	231	210	142	97
Clear land		0.04	0.02	0.03	0.03	0.04	0.06	0.07	0.00
Clear desert		0.15	0.13	0.12	0.09	0.08	0.08	0.04	0.00
Partly cloudy		0.64	0.65	0.63	0.63	0.61	0.46	0.57	0.52
Mostly cloudy		0.18	0.19	0.21	0.25	0.27	0.40	0.32	0.48
Date: 1/23/85	$\vartheta_o = 131(\text{AM})$			$\varphi = 42, 221$	$29 < \text{lon} < 36$				
Total population		232	239	244	233	222	217	188	119
Clear land		0.65	0.65	0.62	0.63	0.62	0.60	0.60	0.13
Clear desert		0.16	0.17	0.16	0.17	0.17	0.17	0.15	0.16
Partly cloudy		0.19	0.18	0.21	0.20	0.22	0.23	0.24	0.70
Mostly cloudy		0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02
Date: 1/23/85	$\vartheta_o = 73(\text{PM})$			$\varphi = 150, 329$	$-8 < \text{lon} < 0$				
Total population		312	315	319	305	308	300	242	100
Clear land		0.00	0.03	0.03	0.07	0.15	0.17	0.18	0.00
Clear desert		0.33	0.34	0.31	0.30	0.19	0.15	0.15	0.07
Partly cloudy		0.67	0.63	0.65	0.62	0.62	0.62	0.65	0.84
Mostly cloudy		0.00	0.00	0.01	0.02	0.03	0.05	0.02	0.09
Date: 1/23/85	$\vartheta_o = 72(\text{PM})$			$\varphi = 150, 329$	$16 < \text{lon} < 23$				
Total population		232	242	244	232	209	235	174	77
Clear land		0.03	0.22	0.27	0.20	0.22	0.27	0.12	0.00
Clear desert		0.17	0.16	0.18	0.14	0.10	0.09	0.09	0.12
Partly cloudy		0.79	0.62	0.56	0.66	0.69	0.64	0.79	0.88

Table II. Continued
(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel (cont.)									
Date: 1/24/85	$\vartheta_o = 137(\text{AM})$	$\varphi = 43, 222$		$-5 < \text{lon} < 5$					
Total population		316	317	323	314	293	284	245	170
Clear desert		0.27	0.26	0.26	0.26	0.27	0.24	0.25	0.07
Partly cloudy		0.65	0.64	0.65	0.65	0.65	0.66	0.69	0.81
Mostly cloudy		0.04	0.05	0.06	0.05	0.06	0.09	0.06	0.12
Overcast		0.04	0.04	0.03	0.04	0.02	0.00	0.00	0.00
Date: 1/24/85	$\vartheta_o = 135(\text{AM})$	$\varphi = 42, 221$		$20 < \text{lon} < 30$					
Total population		234	241	242	232	217	217	183	123
Clear land		0.28	0.27	0.24	0.24	0.25	0.31	0.49	0.07
Clear desert		0.17	0.17	0.16	0.16	0.17	0.17	0.17	0.13
Partly cloudy		0.56	0.56	0.61	0.60	0.58	0.52	0.34	0.80
Date: 1/24/85	$\vartheta_o = 70(\text{PM})$	$\varphi = 152, 331$		$-15 < \text{lon} < -5$					
Total population		312	312	309	307	305	302	218	118
Partly cloudy		0.02	0.01	0.04	0.03	0.01	0.02	0.03	0.01
Mostly cloudy		0.27	0.28	0.27	0.27	0.30	0.28	0.30	0.14
Overcast		0.72	0.71	0.70	0.70	0.69	0.70	0.67	0.86
Date: 1/24/85	$\vartheta_o = 67(\text{PM})$	$\varphi = 152, 330$		$8 < \text{lon} < 16$					
Total population		198	206	212	190	196	186	155	93
Clear land		0.00	0.03	0.12	0.17	0.18	0.15	0.19	0.01
Clear desert		0.20	0.19	0.21	0.17	0.10	0.09	0.10	0.08
Partly cloudy		0.78	0.74	0.62	0.58	0.71	0.76	0.72	0.73
Mostly cloudy		0.03	0.03	0.05	0.07	0.01	0.00	0.00	0.18
Date: 1/24/85	$\vartheta_o = 68(\text{PM})$	$\varphi = 151, 330$		$33 < \text{lon} < 38$					
Total population		230	243	223	223	199	204	173	96
Clear land		0.43	0.37	0.32	0.26	0.27	0.16	0.13	0.00
Clear desert		0.57	0.57	0.54	0.53	0.51	0.47	0.24	0.00
Partly cloudy		0.00	0.06	0.14	0.20	0.20	0.34	0.62	0.82
Mostly cloudy		0.00	0.00	0.00	0.00	0.03	0.03	0.01	0.18
Date: 1/25/85	$\vartheta_o = 142(\text{AM})$	$\varphi = 44, 223$		$-13 < \text{lon} < -4$					
Total population		349	357	357	347	346	329	286	175
Clear desert		0.07	0.08	0.07	0.07	0.06	0.05	0.00	0.00
Partly cloudy		0.57	0.55	0.55	0.50	0.48	0.38	0.45	0.17
Mostly cloudy		0.32	0.31	0.36	0.40	0.45	0.57	0.54	0.83
Overcast		0.04	0.06	0.02	0.03	0.02	0.00	0.00	0.00
Date: 1/25/85	$\vartheta_o = 140(\text{AM})$	$\varphi = 42, 222$		$13 < \text{lon} < 21$					
Total population		234	236	239	236	229	231	176	116
Clear land		0.64	0.59	0.56	0.59	0.60	0.60	0.63	0.06
Clear desert		0.16	0.17	0.17	0.17	0.17	0.17	0.16	0.16
Partly cloudy		0.21	0.23	0.26	0.24	0.23	0.23	0.21	0.78

Table II. Continued
(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel (cont.)									
Date: 1/25/85	ϑ_o =63(PM)	φ =153, 333		0 < lon < 8					
Total population	232	234	232	233	233	233	177	118	
Clear land	0.01	0.02	0.02	0.00	0.00	0.00	0.00	0.00	
Clear desert	0.17	0.17	0.17	0.16	0.09	0.09	0.08	0.01	
Partly cloudy	0.45	0.41	0.39	0.31	0.35	0.33	0.24	0.13	
Mostly cloudy	0.30	0.34	0.35	0.41	0.42	0.40	0.46	0.38	
Overcast	0.08	0.06	0.07	0.12	0.14	0.19	0.21	0.48	
Date: 1/25/85	ϑ_o =65(PM)	φ =153, 332		25 < lon < 35					
Total population	296	294	295	297	297	299	221	148	
Clear land	0.12	0.14	0.18	0.20	0.21	0.17	0.30	0.08	
Clear desert	0.35	0.34	0.35	0.35	0.34	0.30	0.32	0.34	
Partly cloudy	0.53	0.52	0.47	0.45	0.45	0.53	0.38	0.58	
Date: 1/26/85	ϑ_o =144(PM)	φ = 41, 219		-15 < lon < -8					
Total population	23	22	27	31	34	47	49	43	
Mostly cloudy	0.57	0.59	0.59	0.61	0.59	0.51	0.51	0.28	
Overcast	0.43	0.41	0.41	0.39	0.41	0.49	0.49	0.72	
Date: 1/26/85	ϑ_o =145(AM)	φ = 42, 222		5 < lon < 13					
Total population	233	233	237	233	233	233	176	118	
Clear land	0.10	0.10	0.08	0.09	0.05	0.03	0.04	0.00	
Clear desert	0.16	0.17	0.16	0.16	0.17	0.16	0.18	0.04	
Partly cloudy	0.52	0.55	0.55	0.43	0.46	0.48	0.47	0.42	
Mostly cloudy	0.21	0.18	0.21	0.32	0.32	0.33	0.31	0.54	
Date: 1/26/85	ϑ_o =145(PM)	φ = 43, 221		30 < lon < 40					
Total population	248	246	248	248	250	252	196	134	
Clear land	0.79	0.78	0.78	0.77	0.75	0.73	0.68	0.23	
Clear desert	0.21	0.21	0.21	0.21	0.22	0.23	0.25	0.27	
Partly cloudy	0.00	0.01	0.01	0.02	0.02	0.04	0.07	0.50	
Date: 1/26/85	ϑ_o =60(PM)	φ =156, 335		-7 < lon < 2					
Total population	308	294	282	265	249	247	185	143	
Clear desert	0.28	0.29	0.27	0.22	0.20	0.11	0.01	0.00	
Partly cloudy	0.39	0.39	0.37	0.40	0.46	0.42	0.24	0.12	
Mostly cloudy	0.33	0.32	0.36	0.38	0.32	0.46	0.75	0.87	
Overcast	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.01	
Date: 1/26/85	ϑ_o =59(PM)	φ =156, 335		17 < lon < 25					
Total population	232	233	232	233	232	231	171	117	
Clear land	0.38	0.39	0.41	0.44	0.48	0.39	0.35	0.09	
Clear desert	0.17	0.16	0.17	0.17	0.16	0.17	0.16	0.12	
Partly cloudy	0.45	0.44	0.41	0.39	0.36	0.44	0.49	0.79	

Table II. Continued

(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel (cont.)									
Date: 1/27/85	$\vartheta_o = 150(\text{AM})$	$\varphi = 44, 223$		$-4 < \text{lon} < 5$					
Total population	312	312	312	311	312	311	234	157	
Clear land	0.29	0.25	0.21	0.20	0.19	0.14	0.06	0.00	
Clear desert	0.04	0.06	0.04	0.05	0.03	0.01	0.00	0.00	
Partly cloudy	0.54	0.55	0.59	0.54	0.51	0.52	0.53	0.38	
Mostly cloudy	0.13	0.14	0.15	0.22	0.27	0.32	0.41	0.62	
Date: 1/27/85	$\vartheta_o = 149(\text{AM})$	$\varphi = 42, 222$		$20 < \text{lon} < 30$					
Total population	234	233	236	234	233	232	177	119	
Clear land	0.28	0.25	0.27	0.28	0.33	0.37	0.42	0.12	
Clear desert	0.16	0.17	0.17	0.17	0.17	0.17	0.16	0.17	
Partly cloudy	0.56	0.58	0.56	0.56	0.51	0.46	0.41	0.71	
Date: 1/27/85	$\vartheta_o = 57(\text{PM})$	$\varphi = 159, 338$		$-15 < \text{lon} < -5$					
Total population	342	340	342	338	335	329	245	163	
Clear land	0.15	0.14	0.13	0.11	0.09	0.08	0.08	0.01	
Clear desert	0.05	0.04	0.05	0.03	0.01	0.00	0.00	0.00	
Partly cloudy	0.21	0.24	0.25	0.26	0.26	0.21	0.15	0.20	
Mostly cloudy	0.44	0.46	0.47	0.45	0.47	0.52	0.60	0.58	
Overcast	0.14	0.13	0.11	0.14	0.17	0.20	0.18	0.22	
Date: 1/27/85	$\vartheta_o = 54(\text{PM})$	$\varphi = 158, 337$		$10 < \text{lon} < 17$					
Total population	137	137	138	134	133	136	107	80	
Clear land	0.12	0.13	0.12	0.13	0.11	0.00	0.00	0.00	
Clear desert	0.28	0.28	0.30	0.28	0.26	0.15	0.14	0.01	
Partly cloudy	0.59	0.59	0.58	0.59	0.62	0.85	0.86	0.60	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	
Date: 1/27/85	$\vartheta_o = 54(\text{PM})$	$\varphi = 158, 337$		$35 < \text{lon} < 40$					
Total population	155	157	153	153	156	158	125	84	
Clear land	0.63	0.62	0.63	0.60	0.57	0.49	0.39	0.08	
Clear desert	0.37	0.38	0.37	0.40	0.43	0.47	0.52	0.32	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.60	
Date: 1/28/85	$\vartheta_o = 156(\text{AM})$	$\varphi = 44, 223$		$-12 < \text{lon} < -2$					
Total population	351	352	349	350	350	351	264	175	
Clear land	0.20	0.17	0.15	0.14	0.14	0.03	0.00	0.00	
Clear desert	0.17	0.15	0.14	0.11	0.11	0.09	0.06	0.02	
Partly cloudy	0.29	0.35	0.36	0.38	0.37	0.48	0.58	0.38	
Mostly cloudy	0.29	0.30	0.34	0.35	0.38	0.40	0.36	0.59	
Overcast	0.05	0.03	0.02	0.01	0.00	0.00	0.00	0.00	
Date: 1/28/85	$\vartheta_o = 154(\text{AM})$	$\varphi = 41, 221$		$15 < \text{lon} < 22$					
Total population	234	233	237	234	234	233	168	108	
Clear land	0.31	0.23	0.20	0.20	0.17	0.11	0.10	0.00	
Clear desert	0.17	0.17	0.16	0.16	0.17	0.16	0.18	0.17	
Partly cloudy	0.52	0.60	0.64	0.64	0.65	0.73	0.71	0.79	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	

Table II. Continued
(a) January 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel (conc.)									
Date: 1/28/85	$\vartheta_o=51(\text{PM})$	$\varphi=162, 340$		$2 < \text{lon} < 10$					
Total population	234	233	233	233	233	234	175	117	
Clear land	0.20	0.18	0.17	0.17	0.16	0.13	0.04	0.00	
Clear desert	0.17	0.17	0.17	0.17	0.17	0.12	0.10	0.01	
Partly cloudy	0.63	0.66	0.66	0.66	0.67	0.75	0.84	0.55	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.44	
Date: 1/28/85	$\vartheta_o=160(\text{AM})$	$\varphi=126, 317$		$25 < \text{lon} < 40$					
Total population	334	320	308	240	99	47	4	0	
Clear land	0.32	0.32	0.32	0.33	0.68	1.00	1.00	0.00	
Clear desert	0.60	0.67	0.68	0.59	0.13	0.00	0.00	0.00	
Partly cloudy	0.08	0.02	0.00	0.08	0.19	0.00	0.00	0.00	
Date: 1/28/85	$\vartheta_o=53(\text{PM})$	$\varphi=162, 340$		$25 < \text{lon} < 40$					
Total population	381	381	380	380	376	371	273	182	
Clear land	0.22	0.24	0.25	0.26	0.27	0.16	0.16	0.06	
Clear desert	0.49	0.49	0.49	0.49	0.48	0.45	0.46	0.32	
Partly cloudy	0.29	0.27	0.26	0.25	0.25	0.39	0.38	0.62	

Table II. Continued
(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Australia									
Date: 8/08/85	$\vartheta_o=150(\text{PM})$	$\varphi=136, 314$		$120 < \text{lon} < 128$					
Total population		370	356	346	340	320	287	246	179
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Date: 8/08/85	$\vartheta_o=40(\text{PM})$	$\varphi=150, 331$		$127 < \text{lon} < 138$					
Total population		414	424	410	398	369	355	305	224
Clear land		0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.05
Clear desert		0.72	0.72	0.71	0.71	0.70	0.70	0.60	0.14
Partly cloudy		0.04	0.05	0.04	0.06	0.04	0.07	0.15	0.56
Mostly cloudy		0.14	0.13	0.15	0.14	0.15	0.14	0.16	0.25
Date: 8/09/85	$\vartheta_o=144(\text{PM})$	$\varphi=137, 316$		$133 < \text{lon} < 140$					
Total population		247	241	234	232	217	195	174	115
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.92
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Date: 8/09/85	$\vartheta_o=40(\text{PM})$	$\varphi=143, 324$		$120 < \text{lon} < 130$					
Total population		388	380	362	363	334	303	267	212
Clear desert		0.79	0.79	0.79	0.78	0.78	0.78	0.75	0.33
Partly cloudy		0.20	0.20	0.20	0.20	0.18	0.17	0.20	0.52
Mostly cloudy		0.01	0.01	0.01	0.02	0.04	0.06	0.04	0.15
Date: 8/10/85	$\vartheta_o=141(\text{PM})$	$\varphi=132, 311$		$126 < \text{lon} < 137$					
Total population		432	408	405	402	390	334	314	210
Clear land		0.03	0.04	0.05	0.03	0.05	0.05	0.05	0.00
Clear desert		0.97	0.96	0.95	0.97	0.95	0.95	0.95	0.80
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Date: 8/10/85	$\vartheta_o=44(\text{PM})$	$\varphi=139, 322$		$120 < \text{lon} < 123$					
Total population		12	7	9	11	12	15	15	12
Partly cloudy		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Date: 8/10/85	$\vartheta_o=37(\text{PM})$	$\varphi=132, 313$		$136 < \text{lon} < 140$					
Total population		151	154	152	150	154	141	125	82
Clear land		0.91	0.91	0.90	0.92	0.88	0.84	0.83	0.48
Clear desert		0.09	0.09	0.10	0.08	0.12	0.16	0.17	0.13
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39
Date: 8/11/85	$\vartheta_o=136(\text{PM})$	$\varphi=130, 309$		$120 < \text{lon} < 129$					
Total population		431	420	405	402	359	326	290	190
Clear land		0.01	0.01	0.01	0.02	0.03	0.04	0.06	0.04
Clear desert		0.99	0.99	0.99	0.98	0.97	0.96	0.94	0.90
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06

Table II. Continued

(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Australia (cont.)									
Date: 8/11/85	$\vartheta_o=41(\text{PM})$	$\varphi=128, 309$		$128 < \text{lon} < 140$					
Total population		423	433	404	404	361	353	306	223
Clear land		0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.03
Clear desert		0.96	0.96	0.95	0.95	0.95	0.93	0.88	0.31
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.02	0.07	0.61
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Date: 8/12/85	$\vartheta_o=42(\text{PM})$	$\varphi=122, 303$		$122 < \text{lon} < 132$					
Total population		369	379	370	363	338	327	285	197
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.30
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.65
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Date: 8/12/85	$\vartheta_o=130(\text{PM})$	$\varphi=131, 311$		$134 < \text{lon} < 140$					
Total population		159	163	156	156	139	140	117	79
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
Date: 8/13/85	$\vartheta_o=127(\text{PM})$	$\varphi=127, 306$		$128 < \text{lon} < 138$					
Total population		407	407	421	389	391	381	305	203
Clear land		0.09	0.07	0.08	0.07	0.09	0.09	0.09	0.04
Clear desert		0.90	0.91	0.90	0.90	0.90	0.91	0.91	0.71
Partly cloudy		0.02	0.01	0.02	0.02	0.01	0.00	0.00	0.24
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Date: 8/13/85	$\vartheta_o=45(\text{PM})$	$\varphi=118, 300$		$120 < \text{lon} < 124$					
Total population		87	87	86	84	79	70	65	36
Clear desert		1.00	1.00	1.00	1.00	1.00	0.96	0.57	0.03
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.04	0.43	0.86
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
Date: 8/13/85	$\vartheta_o=41(\text{PM})$	$\varphi=108, 292$		$137 < \text{lon} < 140$					
Total population		68	72	69	67	60	64	51	42
Clear land		0.37	0.38	0.39	0.36	0.32	0.20	0.20	0.02
Partly cloudy		0.51	0.49	0.48	0.46	0.47	0.48	0.59	0.98
Mostly cloudy		0.12	0.14	0.13	0.18	0.22	0.31	0.22	0.00
Date: 8/14/85	$\vartheta_o=123(\text{PM})$	$\varphi=125, 305$		$120 < \text{lon} < 132$					
Total population		412	425	410	393	378	350	305	230
Clear land		0.09	0.09	0.10	0.10	0.09	0.11	0.10	0.07
Clear desert		0.91	0.91	0.90	0.90	0.91	0.89	0.90	0.78
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03

Table II. Continued
(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Australia (conc.)									
Date: 8/14/85	$\vartheta_o = 45(\text{PM})$	$\varphi = 107, 287$		$129 < \text{lon} < 140$					
Total population		406	415	414	396	381	363	328	239
Clear land		0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
Clear desert		1.00	1.00	1.00	1.00	1.00	0.99	0.93	0.43
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.51
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
Kalahari Desert									
Date: 8/08/85	$\vartheta_o = 145(\text{PM})$	$\varphi = 141, 320$		$19 < \text{lon} < 25$					
Total population		271	248	246	243	220	204	175	117
Clear desert		0.82	0.84	0.85	0.86	0.88	0.88	0.93	0.72
Partly cloudy		0.12	0.10	0.09	0.08	0.09	0.08	0.04	0.23
Mostly cloudy		0.06	0.06	0.06	0.06	0.03	0.03	0.03	0.05
Date: 8/09/85	$\vartheta_o = 145(\text{PM})$	$\varphi = 133, 311$		$16 < \text{lon} < 19$					
Total population		178	172	167	164	154	135	120	84
Clear land		0.51	0.50	0.50	0.49	0.49	0.47	0.49	0.27
Clear desert		0.49	0.50	0.50	0.51	0.51	0.53	0.51	0.45
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Date: 8/10/85	$\vartheta_o = 41(\text{PM})$	$\varphi = 134, 315$		$14 < \text{lon} < 25$					
Total population		529	534	537	514	515	468	409	269
Clear land		0.41	0.41	0.40	0.41	0.40	0.40	0.40	0.29
Clear desert		0.59	0.59	0.60	0.59	0.60	0.60	0.60	0.48
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
Date: 8/11/85	$\vartheta_o = 132(\text{PM})$	$\varphi = 132, 313$		$19 < \text{lon} < 26$					
Total population		267	248	248	247	230	221	189	104
Clear land		0.05	0.06	0.06	0.07	0.08	0.07	0.11	0.07
Clear desert		0.95	0.94	0.94	0.93	0.92	0.92	0.87	0.80
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.13
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Date: 8/12/85	$\vartheta_o = 130(\text{PM})$	$\varphi = 129, 307$		$16 < \text{lon} < 21$					
Total population		221	206	203	194	173	168	142	102
Clear land		0.33	0.32	0.29	0.30	0.36	0.21	0.20	0.00
Clear desert		0.40	0.40	0.41	0.41	0.42	0.43	0.42	0.38
Partly cloudy		0.25	0.25	0.27	0.24	0.20	0.33	0.37	0.50
Mostly cloudy		0.01	0.04	0.03	0.04	0.03	0.02	0.00	0.12
Date: 8/13/85	$\vartheta_o = 129(\text{PM})$	$\varphi = 122, 301$		$14 < \text{lon} < 26$					
Total population		47	46	45	44	43	38	32	26
Clear land		0.00	0.00	0.00	0.00	0.07	0.18	0.25	0.31
Clear desert		1.00	1.00	1.00	1.00	0.93	0.82	0.75	0.35
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35

Table II. Continued

(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Kalahari Desert (conc.)									
Date: 8/13/85	$\vartheta_o=41(\text{PM})$	$\varphi=104, 288$		$14 < \text{lon} < 16$					
Total population	23	21	26	23	25	25	24	21	
Clear land	0.96	1.00	1.00	1.00	1.00	1.00	0.96	0.38	
Clear desert	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.14	
Partly cloudy	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.48	
Sahara Desert									
Date: 8/08/85	$\vartheta_o=141(\text{PM})$	$\varphi=32, 208$		$-15 < \text{lon} < -5$					
Total population	280	285	279	272	268	262	201	128	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	
Date: 8/08/85	$\vartheta_o=139(\text{AM})$	$\varphi=36, 214$		$0 < \text{lon} < 15$					
Total population	572	597	578	561	523	506	436	300	
Clear desert	0.96	0.97	0.96	0.96	0.98	0.99	1.00	0.91	
Partly cloudy	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.02	
Mostly cloudy	0.03	0.03	0.03	0.03	0.02	0.00	0.00	0.07	
Date: 8/08/85	$\vartheta_o=142(\text{PM})$	$\varphi=39, 216$		$23 < \text{lon} < 32$					
Total population	453	460	432	428	395	371	341	239	
Clear desert	0.90	0.89	0.90	0.89	0.89	0.90	0.92	0.85	
Partly cloudy	0.02	0.03	0.03	0.04	0.06	0.05	0.06	0.07	
Mostly cloudy	0.07	0.07	0.07	0.06	0.05	0.05	0.03	0.08	
Date: 8/08/85	$\vartheta_o=28(\text{AM})$	$\varphi=47, 226$		$0 < \text{lon} < 12$					
Total population	522	528	538	516	516	496	407	253	
Clear desert	0.68	0.68	0.69	0.67	0.63	0.48	0.29	0.00	
Partly cloudy	0.19	0.19	0.19	0.20	0.22	0.29	0.43	0.36	
Mostly cloudy	0.10	0.11	0.11	0.12	0.14	0.23	0.28	0.64	
Overcast	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	
Date: 8/08/85	$\vartheta_o=30(\text{AM})$	$\varphi=44, 223$		$22 < \text{lon} < 33$					
Total population	493	449	449	444	433	362	340	240	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.84	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
Date: 8/09/85	$\vartheta_o=140(\text{PM})$	$\varphi=44, 222$		$-8 < \text{lon} < 4$					
Total population	450	464	446	442	407	378	296	167	
Clear desert	1.00	1.00	0.99	0.99	0.99	1.00	1.00	0.86	
Partly cloudy	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.05	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	
Date: 8/09/85	$\vartheta_o=141(\text{PM})$	$\varphi=45, 223$		$14 < \text{lon} < 28$					
Total population	571	579	568	555	538	513	442	301	
Clear desert	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.97	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	

Table II. Continued

(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahara Desert (cont.)									
Date: 8/09/85	$\vartheta_o = 32(\text{AM})$	$\varphi = 50, 228$		$-8 < \text{lon} < 2$					
Total population	320	321	334	311	311	307	263	166	
Clear desert	0.87	0.87	0.85	0.87	0.81	0.52	0.21	0.00	
Partly cloudy	0.12	0.12	0.14	0.09	0.09	0.34	0.60	0.50	
Mostly cloudy	0.01	0.01	0.01	0.04	0.10	0.14	0.19	0.50	
Date: 8/09/85	$\vartheta_o = 33(\text{AM})$	$\varphi = 49, 228$		$14 < \text{lon} < 28$					
Total population	593	548	553	550	550	453	426	278	
Clear desert	1.00	1.00	0.99	0.98	0.97	0.94	0.91	0.61	
Partly cloudy	0.00	0.00	0.01	0.02	0.03	0.06	0.09	0.28	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	
Date: 8/10/85	$\vartheta_o = 141(\text{PM})$	$\varphi = 53, 231$		$8 < \text{lon} < 20$					
Total population	544	554	520	519	476	443	406	291	
Clear desert	0.88	0.87	0.87	0.88	0.89	0.88	0.88	0.83	
Partly cloudy	0.02	0.03	0.03	0.02	0.02	0.01	0.02	0.02	
Mostly cloudy	0.02	0.01	0.02	0.02	0.01	0.03	0.02	0.08	
Overcast	0.08	0.09	0.09	0.08	0.08	0.08	0.07	0.07	
Date: 8/10/85	$\vartheta_o = 37(\text{AM})$	$\varphi = 52, 231$		$-14 < \text{lon} < -7$					
Total population	257	242	239	241	236	201	186	141	
Clear desert	0.97	0.98	0.99	0.98	0.95	0.80	0.54	0.01	
Partly cloudy	0.03	0.02	0.01	0.02	0.05	0.18	0.40	0.57	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.42	
Overcast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
Date: 8/10/85	$\vartheta_o = 39(\text{AM})$	$\varphi = 50, 229$		$4 < \text{lon} < 20$					
Total population	705	655	651	646	614	529	498	368	
Clear desert	0.80	0.79	0.79	0.77	0.73	0.59	0.57	0.35	
Partly cloudy	0.16	0.17	0.16	0.17	0.18	0.27	0.29	0.33	
Mostly cloudy	0.03	0.03	0.03	0.04	0.07	0.13	0.14	0.32	
Overcast	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.01	
Date: 8/11/85	$\vartheta_o = 141(\text{PM})$	$\varphi = 53, 231$		$-15 < \text{lon} < -5$					
Total population	284	301	276	275	262	264	207	135	
Clear desert	0.97	0.96	0.97	0.96	0.95	0.95	0.95	0.84	
Partly cloudy	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.02	
Mostly cloudy	0.02	0.02	0.02	0.02	0.04	0.05	0.04	0.13	
Overcast	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.01	
Date: 8/11/85	$\vartheta_o = 138(\text{PM})$	$58,236$		$0 < \text{lon} < 15$					
Total population	521	522	519	511	487	463	395	232	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	

Table II. Continued

(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahara Desert (cont.)									
Date: 8/11/85	$\vartheta_o = 140(\text{PM})$	$\varphi = 61, 240$		$20 < \text{lon} < 35$					
Total population	261	245	258	278	271	220	214	173	
Clear desert	1.00	0.99	0.98	0.96	0.92	0.88	0.88	0.70	
Partly cloudy	0.00	0.00	0.01	0.02	0.05	0.07	0.08	0.08	
Mostly cloudy	0.00	0.01	0.02	0.02	0.03	0.05	0.04	0.18	
Overcast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	
Date: 8/11/85	$\vartheta_o = 42(\text{AM})$	$\varphi = 53, 231$		$-5 < \text{lon} < 15$					
Total population	621	563	561	561	561	437	423	330	
Clear desert	0.85	0.83	0.83	0.83	0.81	0.79	0.77	0.50	
Partly cloudy	0.08	0.09	0.09	0.08	0.08	0.09	0.06	0.21	
Mostly cloudy	0.08	0.08	0.08	0.09	0.11	0.12	0.17	0.29	
Date: 8/11/85	$\vartheta_o = 44(\text{AM})$	$\varphi = 51, 228$		$20 < \text{lon} < 35$					
Total population	440	414	402	403	386	331	310	233	
Clear desert	1.00	1.00	1.00	1.00	1.00	0.98	0.96	0.64	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.26	
Mostly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	
Date: 8/12/85	$\vartheta_o = 137(\text{PM})$	$\varphi = 65, 242$		$-6 < \text{lon} < 10$					
Total population	505	505	504	494	482	481	377	246	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.97	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
Date: 8/12/85	$\vartheta_o = 137(\text{PM})$	$\varphi = 65, 244$		$16 < \text{lon} < 30$					
Total population	562	565	569	555	554	533	439	284	
Clear desert	0.84	0.84	0.84	0.83	0.84	0.83	0.85	0.80	
Partly cloudy	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02	
Mostly cloudy	0.08	0.07	0.08	0.08	0.07	0.07	0.06	0.07	
Overcast	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.11	
Date: 8/12/85	$\vartheta_o = 47(\text{AM})$	$\varphi = 54, 233$		$-6 < \text{lon} < 4$					
Total population	379	382	389	371	376	365	298	185	
Clear desert	0.91	0.90	0.89	0.86	0.80	0.59	0.37	0.05	
Partly cloudy	0.09	0.09	0.09	0.13	0.18	0.37	0.52	0.32	
Mostly cloudy	0.00	0.01	0.01	0.01	0.02	0.04	0.11	0.62	
Date: 8/12/85	$\vartheta_o = 47(\text{AM})$	$\varphi = 55, 232$		$15 < \text{lon} < 30$					
Total population	564	569	557	549	523	502	422	274	
Clear desert	0.87	0.88	0.87	0.87	0.86	0.86	0.85	0.66	
Partly cloudy	0.09	0.08	0.09	0.09	0.09	0.08	0.07	0.17	
Mostly cloudy	0.04	0.04	0.04	0.05	0.06	0.07	0.09	0.17	
Date: 8/13/85	$\vartheta_o = 136(\text{PM})$	$\varphi = 74, 250$		$-15 < \text{lon} < 0$					
Total population	286	284	280	280	275	271	214	141	
Clear desert	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.97	
Partly cloudy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	

Table II. Continued

(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahara Desert (conc.)									
Date: 8/13/85	$\vartheta_o = 136(\text{PM})$	$\varphi = 73, 250$		$8 < \text{lon} < 22$					
Total population		521	531	526	521	494	505	392	260
Clear desert		0.99	0.99	0.99	0.99	0.99	1.00	1.00	0.97
Partly cloudy		0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.03
Date: 8/13/85	$\vartheta_o = 51(\text{AM})$	$\varphi = 56, 236$		$-14 < \text{lon} < -4$					
Total population		253	260	264	265	252	244	225	135
Clear desert		0.57	0.47	0.43	0.29	0.12	0.01	0.00	0.00
Partly cloudy		0.33	0.46	0.42	0.48	0.57	0.45	0.28	0.11
Mostly cloudy		0.10	0.08	0.16	0.23	0.31	0.55	0.72	0.88
Overcast		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Date: 8/13/85	$\vartheta_o = 52(\text{AM})$	$\varphi = 55, 234$		$6 < \text{lon} < 22$					
Total population		659	655	652	649	620	608	504	326
Clear desert		0.84	0.83	0.83	0.81	0.74	0.75	0.76	0.57
Partly cloudy		0.08	0.09	0.09	0.11	0.18	0.15	0.11	0.23
Mostly cloudy		0.04	0.04	0.03	0.05	0.06	0.07	0.10	0.15
Overcast		0.04	0.04	0.05	0.04	0.02	0.03	0.03	0.05
Arabian peninsula									
Date: 8/08/85	$\vartheta_o = 144(\text{PM})$	$\varphi = 40, 218$		$48 < \text{lon} < 55$					
Total population		283	299	274	274	261	230	215	126
Clear land		0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.00
Clear desert		1.00	1.00	0.99	0.99	0.97	0.95	0.95	0.85
Partly cloudy		0.00	0.00	0.01	0.00	0.01	0.02	0.01	0.10
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Date: 8/08/85	$\vartheta_o = 28(\text{AM})$	$\varphi = 48, 224$		$44 < \text{lon} < 56$					
Total population		157	145	141	144	142	119	108	71
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.66
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.28
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Date: 8/09/85	$\vartheta_o = 141(\text{PM})$	$\varphi = 45, 222$		$43 < \text{lon} < 48$					
Total population		232	242	238	230	213	220	179	129
Clear land		0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.00
Clear desert		1.00	1.00	1.00	0.99	0.99	0.97	0.95	0.89
Partly cloudy		0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.07
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Date: 8/09/85	$\vartheta_o = 34(\text{AM})$	$\varphi = 47, 226$		$38 < \text{lon} < 51$					
Total population		631	617	618	604	595	549	484	293
Clear desert		1.00	0.99	0.99	0.99	0.98	0.99	0.98	0.71
Partly cloudy		0.00	0.01	0.01	0.01	0.02	0.01	0.02	0.24
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05

Table II. Continued

(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Arabian peninsula (conc.)									
Date: 8/10/85	$\vartheta_o = 136(\text{PM})$	$\varphi = 45, 224$		$39 < \text{lon} < 47$					
Total population		279	288	266	271	245	229	222	137
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Date: 8/11/85	$\vartheta_o = 133(\text{PM})$	$\varphi = 49, 228$		$36 < \text{lon} < 44$					
Total population		96	107	88	93	82	71	63	54
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
Date: 8/11/85	$\vartheta_o = 141(\text{PM})$	$\varphi = 61, 240$		$49 < \text{lon} < 56$					
Total population		207	205	210	201	204	173	175	100
Clear land		0.01	0.02	0.03	0.03	0.04	0.03	0.03	0.00
Clear desert		0.99	0.98	0.97	0.97	0.96	0.97	0.91	0.78
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.05
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.17
Date: 8/11/85	$\vartheta_o = 41(\text{AM})$	$\varphi = 54, 232$		$53 < \text{lon} < 56$					
Total population		56	52	49	52	53	41	40	28
Clear desert		1.00	1.00	1.00	1.00	1.00	0.98	0.77	0.11
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.02	0.22	0.89
Date: 8/12/85	$\vartheta_o = 139(\text{PM})$	$\varphi = 68, 245$		$43 < \text{lon} < 50$					
Total population		243	255	240	239	217	210	190	154
Clear desert		0.75	0.73	0.73	0.75	0.75	0.78	0.82	0.66
Partly cloudy		0.21	0.24	0.23	0.19	0.17	0.12	0.11	0.08
Mostly cloudy		0.03	0.03	0.04	0.06	0.08	0.10	0.07	0.23
Overcast		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Date: 8/12/85	$\vartheta_o = 48(\text{AM})$	$\varphi = 53, 230$		$38 < \text{lon} < 52$					
Total population		651	670	639	635	592	562	494	361
Clear desert		0.98	0.97	0.97	0.97	0.94	0.88	0.87	0.57
Partly cloudy		0.02	0.03	0.03	0.03	0.06	0.12	0.13	0.32
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
Date: 8/13/85	$\vartheta_o = 133(\text{PM})$	$\varphi = 66, 243$		$39 < \text{lon} < 47$					
Total population		348	376	346	346	316	306	262	188
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Date: 8/13/85	$\vartheta_o = 50(\text{AM})$	$\varphi = 56, 239$		$35 < \text{lon} < 46$					
Total population		55	58	57	57	58	51	65	61
Clear land		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Clear desert		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25
Partly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
Mostly cloudy		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07

Table II. Continued

(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel									
Date: 8/08/85	$\vartheta_o = 149(\text{PM})$	$\varphi = 49, 226$		$-5 < \text{lon} < 5$					
Total population		316	333	316	310	288	275	255	177
Clear desert		0.39	0.37	0.37	0.37	0.38	0.39	0.39	0.24
Partly cloudy		0.21	0.23	0.20	0.19	0.19	0.19	0.15	0.12
Mostly cloudy		0.09	0.08	0.09	0.11	0.11	0.10	0.13	0.20
Overcast		0.32	0.32	0.33	0.33	0.32	0.32	0.33	0.44
Date: 8/08/85	$\vartheta_o = 150(\text{PM})$	$\varphi = 49, 227$		$18 < \text{lon} < 27$					
Total population		240	252	236	236	221	191	180	130
Partly cloudy		0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Mostly cloudy		0.48	0.47	0.47	0.43	0.41	0.33	0.28	0.10
Overcast		0.49	0.50	0.53	0.57	0.58	0.67	0.72	0.90
Date: 8/08/85	$\vartheta_o = 22(\text{AM})$	$\varphi = 67, 248$		$-15 < \text{lon} < -10$					
Total population		242	231	222	225	219	187	177	122
Partly cloudy		0.34	0.32	0.30	0.23	0.13	0.11	0.06	0.00
Mostly cloudy		0.33	0.34	0.36	0.42	0.53	0.50	0.54	0.34
Overcast		0.33	0.34	0.35	0.36	0.34	0.40	0.40	0.66
Date: 8/08/85	$\vartheta_o = 22(\text{AM})$	$\varphi = 68, 247$		$5 < \text{lon} < 15$					
Total population		250	240	232	231	214	219	176	119
Clear land		0.04	0.05	0.03	0.01	0.01	0.00	0.00	0.00
Partly cloudy		0.77	0.74	0.77	0.81	0.78	0.77	0.72	0.31
Mostly cloudy		0.16	0.16	0.15	0.13	0.17	0.21	0.28	0.69
Overcast		0.04	0.05	0.06	0.05	0.05	0.03	0.00	0.00
Date: 8/08/85	$\vartheta_o = 22(\text{AM})$	$\varphi = 64, 245$		$30 < \text{lon} < 40$					
Total population		379	357	348	349	340	279	268	194
Clear land		0.07	0.06	0.07	0.05	0.03	0.00	0.00	0.00
Clear desert		0.42	0.41	0.39	0.39	0.32	0.20	0.17	0.06
Partly cloudy		0.41	0.41	0.40	0.40	0.46	0.53	0.51	0.31
Mostly cloudy		0.10	0.11	0.14	0.16	0.20	0.24	0.31	0.58
Overcast		0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.05
Date: 8/09/85	$\vartheta_o = 148(\text{PM})$	$\varphi = 56, 235$		$-15 < \text{lon} < -4$					
Total population		353	360	358	350	334	324	275	170
Clear desert		0.39	0.40	0.41	0.40	0.34	0.30	0.25	0.15
Partly cloudy		0.06	0.05	0.03	0.05	0.11	0.09	0.06	0.04
Mostly cloudy		0.14	0.12	0.11	0.09	0.06	0.09	0.17	0.17
Overcast		0.42	0.43	0.44	0.46	0.49	0.53	0.52	0.64
Date: 8/09/85	$\vartheta_o = 149(\text{PM})$	$\varphi = 58, 236$		$11 < \text{lon} < 20$					
Total population		206	213	207	205	197	186	165	127
Clear desert		0.18	0.17	0.16	0.13	0.13	0.11	0.12	0.08
Partly cloudy		0.41	0.41	0.39	0.43	0.44	0.41	0.41	0.24
Mostly cloudy		0.26	0.27	0.27	0.21	0.22	0.22	0.21	0.32
Overcast		0.15	0.14	0.18	0.22	0.21	0.26	0.25	0.36

Table II. Continued

(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel (cont.)									
Date: 8/09/85	$\vartheta_o = 150(\text{PM})$	$\varphi = 60, 237$		$35 < \text{lon} < 40$					
Total population	158	157	151	149	141	128	100	78	
Clear desert	0.50	0.53	0.51	0.48	0.45	0.42	0.40	0.12	
Partly cloudy	0.15	0.10	0.12	0.16	0.28	0.27	0.39	0.37	
Mostly cloudy	0.35	0.36	0.34	0.36	0.27	0.29	0.15	0.27	
Overcast	0.00	0.01	0.03	0.01	0.01	0.02	0.06	0.24	
Date: 8/09/85	$\vartheta_o = 27(\text{AM})$	$\varphi = 64, 243$		$-1 < \text{lon} < 8$					
Total population	312	311	324	306	300	298	247	150	
Clear desert	0.26	0.24	0.23	0.17	0.07	0.00	0.00	0.00	
Partly cloudy	0.52	0.54	0.56	0.59	0.68	0.65	0.44	0.11	
Mostly cloudy	0.13	0.13	0.12	0.12	0.14	0.20	0.38	0.77	
Overcast	0.09	0.09	0.09	0.11	0.12	0.15	0.18	0.13	
Date: 8/09/85	$\vartheta_o = 26(\text{AM})$	$\varphi = 67, 246$		$25 < \text{lon} < 32$					
Total population	254	234	233	233	232	197	173	130	
Clear land	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	
Clear desert	0.16	0.17	0.16	0.17	0.09	0.01	0.00	0.00	
Partly cloudy	0.30	0.29	0.26	0.24	0.33	0.36	0.37	0.15	
Mostly cloudy	0.46	0.45	0.49	0.51	0.52	0.55	0.57	0.76	
Overcast	0.06	0.07	0.07	0.07	0.06	0.08	0.06	0.08	
Date: 8/10/85	$\vartheta_o = 147(\text{PM})$	$\varphi = 66, 245$		$3 < \text{lon} < 11$					
Total population	249	246	236	235	215	202	173	127	
Partly cloudy	0.52	0.45	0.38	0.27	0.16	0.14	0.03	0.00	
Mostly cloudy	0.30	0.37	0.46	0.55	0.66	0.60	0.45	0.24	
Overcast	0.18	0.18	0.17	0.17	0.18	0.26	0.52	0.76	
Date: 8/10/85	$\vartheta_o = 146(\text{PM})$	$\varphi = 63, 242$		$27 < \text{lon} < 37$					
Total population	412	400	382	379	357	316	283	200	
Clear desert	0.20	0.21	0.20	0.19	0.17	0.16	0.14	0.09	
Partly cloudy	0.23	0.22	0.21	0.18	0.14	0.06	0.06	0.00	
Mostly cloudy	0.34	0.35	0.37	0.39	0.41	0.47	0.41	0.37	
Overcast	0.23	0.22	0.23	0.24	0.27	0.30	0.38	0.54	
Date: 8/10/85	$\vartheta_o = 32(\text{AM})$	$\varphi = 63, 242$		$-10 < \text{lon} < 0$					
Total population	361	365	362	347	326	316	273	193	
Clear desert	0.11	0.12	0.09	0.08	0.04	0.01	0.00	0.00	
Partly cloudy	0.10	0.11	0.13	0.10	0.07	0.10	0.08	0.01	
Mostly cloudy	0.31	0.29	0.27	0.29	0.36	0.35	0.38	0.31	
Overcast	0.48	0.49	0.51	0.53	0.53	0.53	0.54	0.68	
Date: 8/10/85	$\vartheta_o = 31(\text{AM})$	$\varphi = 65, 245$		$15 < \text{lon} < 25$					
Total population	248	241	238	232	219	197	182	134	
Partly cloudy	0.29	0.26	0.22	0.19	0.12	0.04	0.01	0.00	
Mostly cloudy	0.33	0.40	0.42	0.41	0.48	0.51	0.49	0.28	
Overcast	0.38	0.34	0.36	0.40	0.40	0.45	0.49	0.72	

Table II. Continued

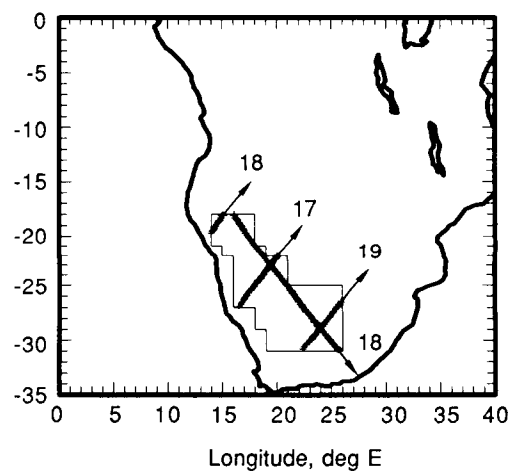
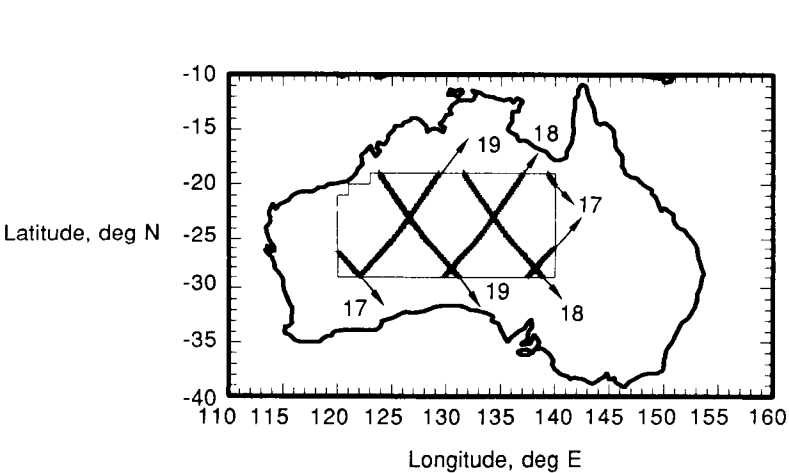
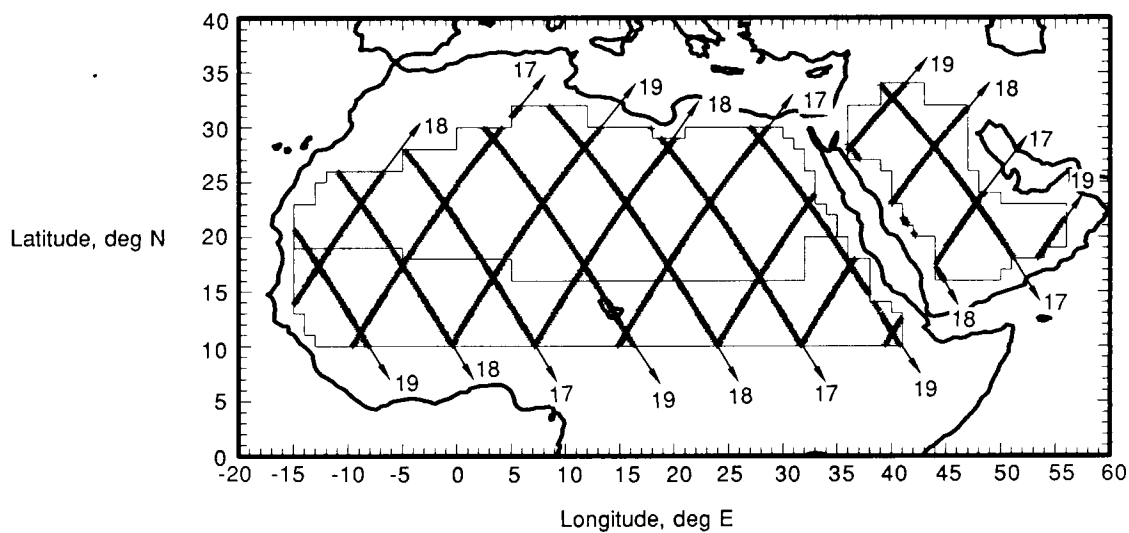
(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel (cont.)									
Date: 8/11/85	$\vartheta_o = 144(\text{PM})$	$\varphi = 72, 250$		$-6 < \text{lon} < 5$					
Total population	329	313	316	305	309	282	244	139	
Clear desert	0.10	0.09	0.09	0.09	0.08	0.04	0.02	0.00	
Partly cloudy	0.19	0.20	0.13	0.09	0.07	0.09	0.10	0.01	
Mostly cloudy	0.47	0.43	0.47	0.50	0.49	0.43	0.33	0.17	
Overcast	0.23	0.27	0.31	0.32	0.37	0.44	0.55	0.82	
Date: 8/11/85	$\vartheta_o = 145(\text{PM})$	$\varphi = 73, 253$		$20 < \text{lon} < 28$					
Total population	195	185	174	157	146	120	139	116	
Clear desert	0.01	0.06	0.11	0.14	0.22	0.19	0.11	0.00	
Partly cloudy	0.00	0.01	0.01	0.01	0.04	0.10	0.07	0.03	
Mostly cloudy	0.03	0.04	0.06	0.06	0.08	0.12	0.13	0.09	
Overcast	0.96	0.88	0.82	0.79	0.66	0.59	0.69	0.88	
Date: 8/11/85	$\vartheta_o = 36(\text{AM})$	$\varphi = 63, 243$		$-15 < \text{lon} < -7$					
Total population	310	298	303	293	289	286	231	156	
Partly cloudy	0.11	0.07	0.08	0.10	0.07	0.06	0.00	0.00	
Mostly cloudy	0.15	0.16	0.16	0.14	0.20	0.16	0.19	0.14	
Overcast	0.74	0.77	0.77	0.76	0.73	0.78	0.81	0.86	
Date: 8/11/85	$\vartheta_o = 36(\text{AM})$	$\varphi = 65, 245$		$8 < \text{lon} < 16$					
Total population	231	206	204	203	200	162	155	120	
Partly cloudy	0.89	0.89	0.85	0.87	0.87	0.77	0.63	0.14	
Mostly cloudy	0.11	0.11	0.15	0.13	0.13	0.23	0.37	0.86	
Date: 8/11/85	$\vartheta_o = 36(\text{AM})$	$\varphi = 63, 241$		$32 < \text{lon} < 41$					
Total population	427	398	392	394	371	326	302	226	
Clear desert	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.00	
Partly cloudy	0.33	0.31	0.28	0.21	0.16	0.07	0.02	0.03	
Mostly cloudy	0.37	0.37	0.38	0.46	0.52	0.56	0.62	0.48	
Overcast	0.26	0.27	0.29	0.29	0.29	0.34	0.34	0.49	
Date: 8/12/85	$\vartheta_o = 141(\text{PM})$	$\varphi = 79, 256$		$-12 < \text{lon} < -4$					
Total population	314	320	320	322	324	321	255	172	
Clear desert	0.27	0.29	0.27	0.29	0.31	0.28	0.32	0.16	
Partly cloudy	0.18	0.16	0.20	0.20	0.21	0.22	0.16	0.15	
Mostly cloudy	0.12	0.11	0.10	0.08	0.05	0.07	0.08	0.16	
Overcast	0.44	0.43	0.44	0.43	0.43	0.43	0.44	0.53	
Date: 8/12/85	$\vartheta_o = 142(\text{PM})$	$\varphi = 79, 258$		$12 < \text{lon} < 20$					
Total population	232	240	241	230	221	225	188	117	
Partly cloudy	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	
Mostly cloudy	0.54	0.52	0.46	0.37	0.31	0.27	0.23	0.04	
Overcast	0.46	0.48	0.54	0.63	0.68	0.73	0.77	0.96	
Date: 8/12/85	$\vartheta_o = 142(\text{PM})$	$\varphi = 82, 259$		$36 < \text{lon} < 41$					
Total population	123	124	115	117	102	95	82	59	
Clear desert	0.72	0.72	0.76	0.75	0.78	0.86	1.00	0.41	
Partly cloudy	0.23	0.19	0.18	0.23	0.22	0.14	0.00	0.44	
Mostly cloudy	0.06	0.09	0.06	0.02	0.00	0.00	0.00	0.15	

Table II. Concluded

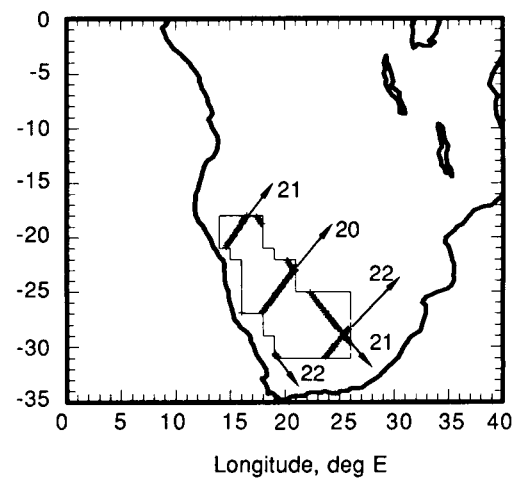
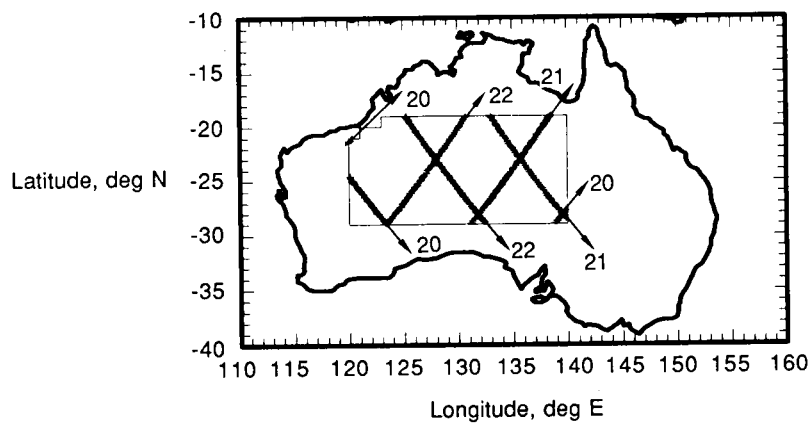
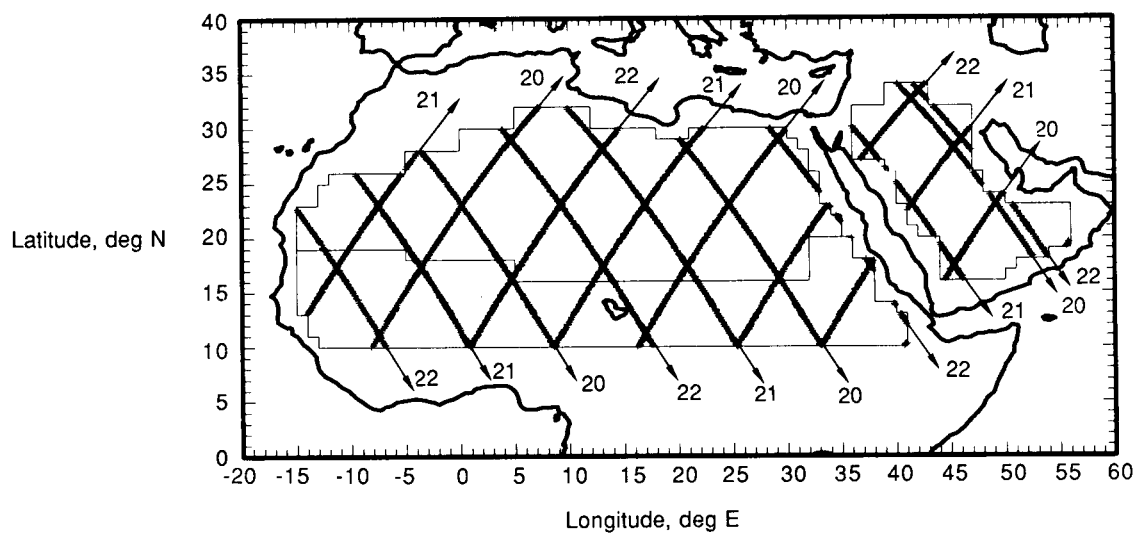
(b) August 1985 along-track data

		Viewing zenith angle range, deg							
		0	10	20	30	40	50	60	70
		10	20	30	40	50	60	70	80
Sahel (conc.)									
Date: 8/12/85	$\vartheta_o = 41(\text{AM})$	$\varphi = 63, 243$		$0 < \text{lon} < 10$					
Total population	312	316	315	312	300	302	245	165	
Partly cloudy	0.30	0.30	0.25	0.17	0.08	0.05	0.00	0.00	
Mostly cloudy	0.54	0.56	0.60	0.66	0.78	0.79	0.84	0.50	
Overcast	0.15	0.15	0.15	0.17	0.14	0.16	0.16	0.50	
Date: 8/12/85	$\vartheta_o = 40(\text{AM})$	$\varphi = 66, 243$		$15 < \text{lon} < 33$					
Total population	239	246	233	229	222	215	188	124	
Partly cloudy	0.27	0.29	0.27	0.23	0.17	0.05	0.00	0.00	
Mostly cloudy	0.49	0.48	0.52	0.55	0.58	0.67	0.75	0.73	
Overcast	0.24	0.22	0.21	0.22	0.25	0.28	0.25	0.27	
Date: 8/13/85	$\vartheta_o = 137(\text{PM})$	$\varphi = 81, 258$		$-15 < \text{lon} < -10$					
Total population	177	173	177	177	175	172	136	94	
Clear desert	0.87	0.86	0.86	0.86	0.82	0.72	0.63	0.37	
Partly cloudy	0.11	0.12	0.12	0.14	0.18	0.28	0.29	0.12	
Mostly cloudy	0.02	0.02	0.02	0.00	0.00	0.00	0.07	0.33	
Overcast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	
Date: 8/13/85	$\vartheta_o = 138(\text{PM})$	$\varphi = 85, 263$		$5 < \text{lon} < 12$					
Total population	235	236	235	231	228	230	175	116	
Clear desert	0.17	0.17	0.17	0.16	0.16	0.17	0.17	0.10	
Partly cloudy	0.46	0.45	0.45	0.45	0.45	0.42	0.40	0.22	
Mostly cloudy	0.03	0.03	0.03	0.03	0.04	0.04	0.08	0.26	
Overcast	0.34	0.34	0.35	0.35	0.35	0.36	0.35	0.42	
Date: 8/13/85	$\vartheta_o = 138(\text{PM})$	$\varphi = 83, 261$		$30 < \text{lon} < 38$					
Total population	323	331	314	309	290	283	251	175	
Clear desert	0.20	0.18	0.17	0.15	0.11	0.10	0.15	0.11	
Partly cloudy	0.11	0.13	0.13	0.15	0.23	0.22	0.14	0.07	
Mostly cloudy	0.38	0.37	0.38	0.40	0.40	0.39	0.46	0.38	
Overcast	0.30	0.31	0.32	0.29	0.26	0.30	0.25	0.44	
Date: 8/13/85	$\vartheta_o = 46(\text{AM})$	$\varphi = 62, 244$		$-11 < \text{lon} < 1$					
Total population	356	363	345	327	325	302	263	179	
Clear desert	0.10	0.09	0.07	0.09	0.06	0.00	0.00	0.00	
Partly cloudy	0.40	0.41	0.39	0.34	0.33	0.16	0.09	0.01	
Mostly cloudy	0.46	0.46	0.51	0.54	0.56	0.78	0.83	0.83	
Overcast	0.05	0.04	0.04	0.04	0.05	0.06	0.08	0.16	
Date: 8/13/85	$\vartheta_o = 45(\text{AM})$	$\varphi = 64, 245$		$18 < \text{lon} < 25$					
Total population	241	243	235	231	222	216	181	111	
Partly cloudy	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Mostly cloudy	0.39	0.42	0.38	0.37	0.34	0.25	0.24	0.08	
Overcast	0.59	0.58	0.62	0.63	0.66	0.75	0.76	0.92	



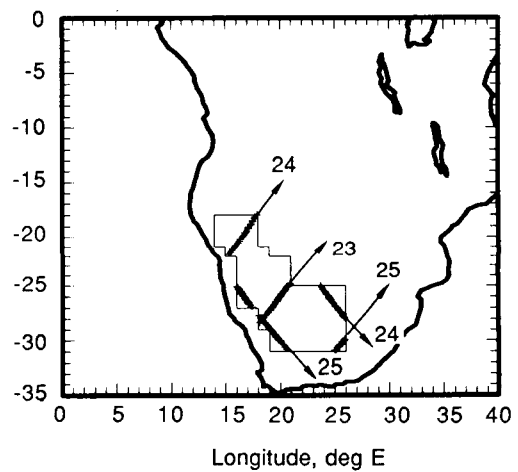
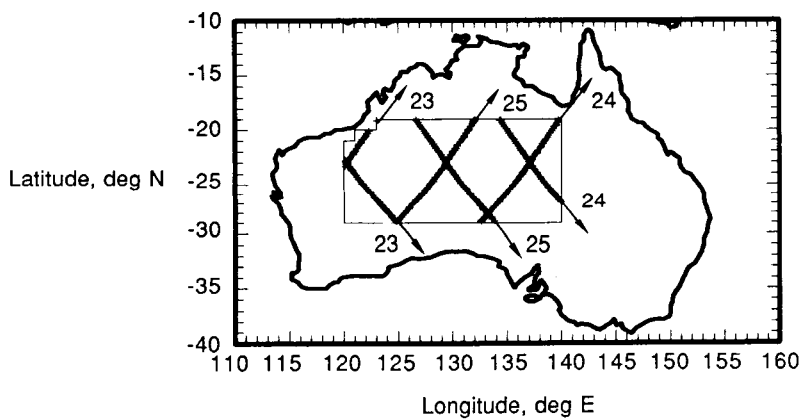
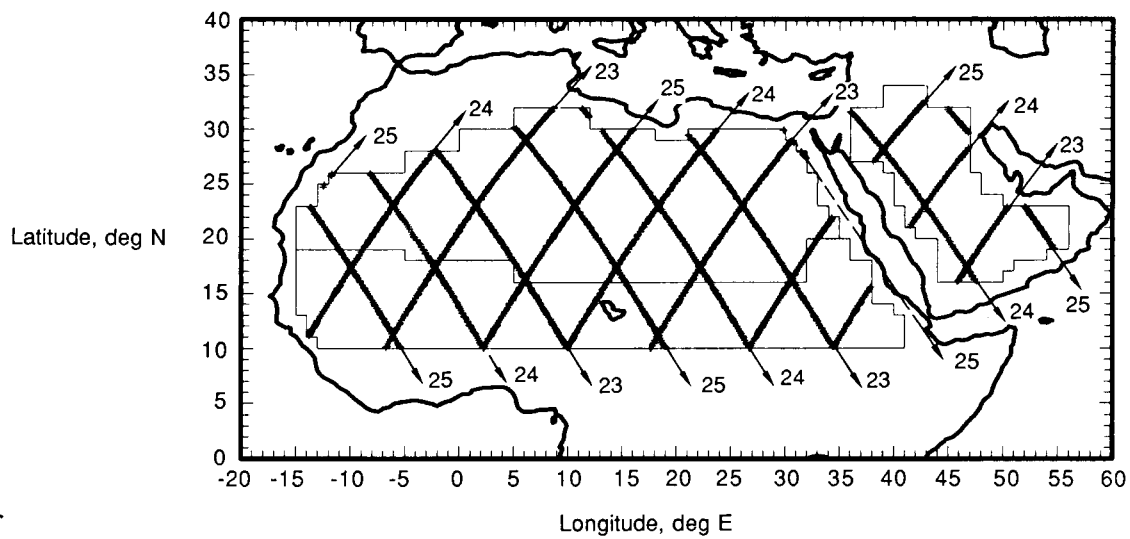
(a) January 17-19, 1985.

Figure 1. ERBS ground tracks during along-track scanning mode in January and August 1985.



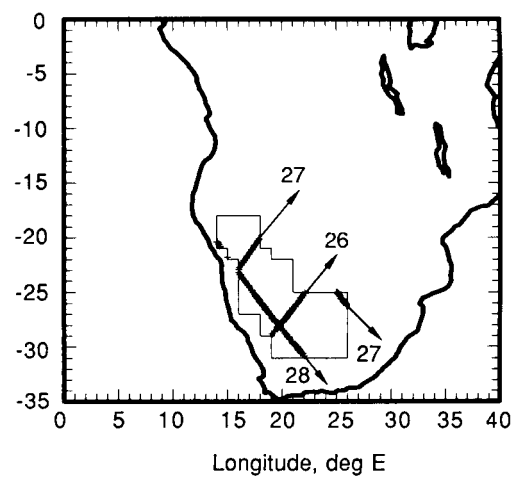
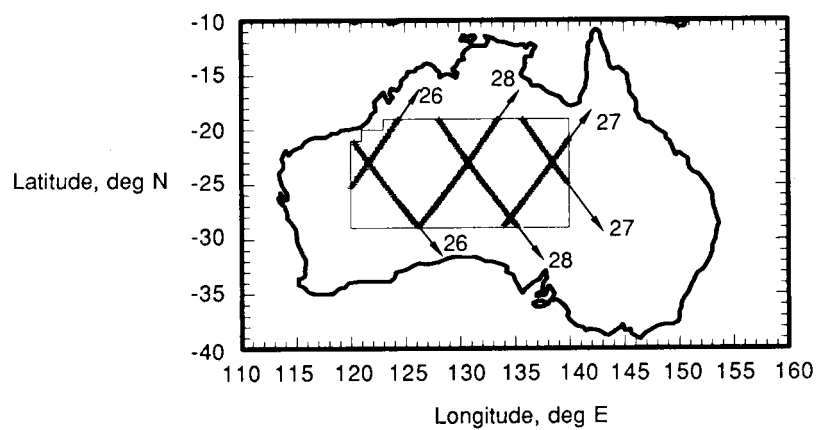
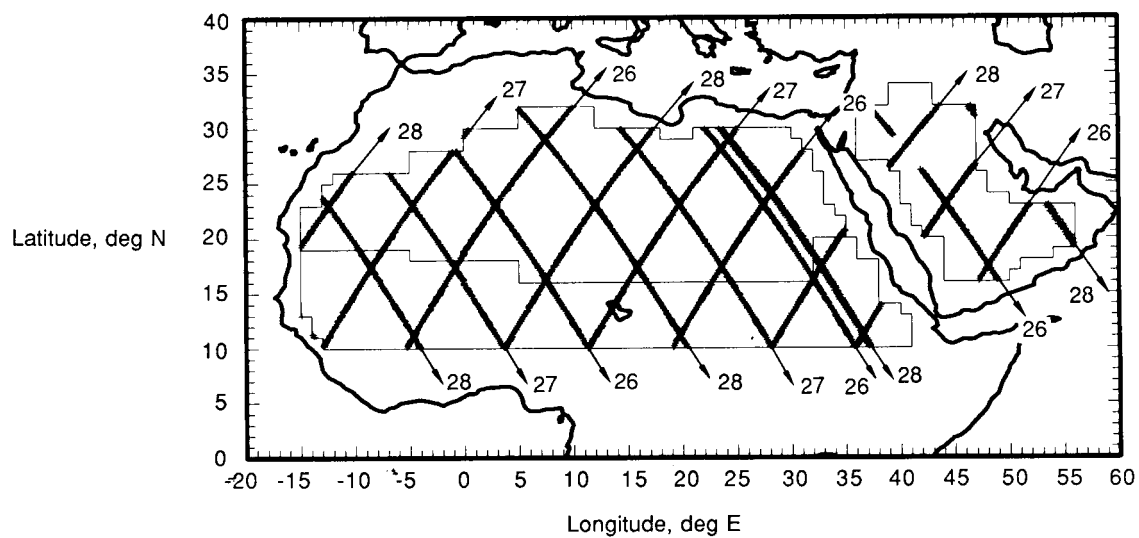
(b) January 20–22, 1985.

Figure 1. Continued.



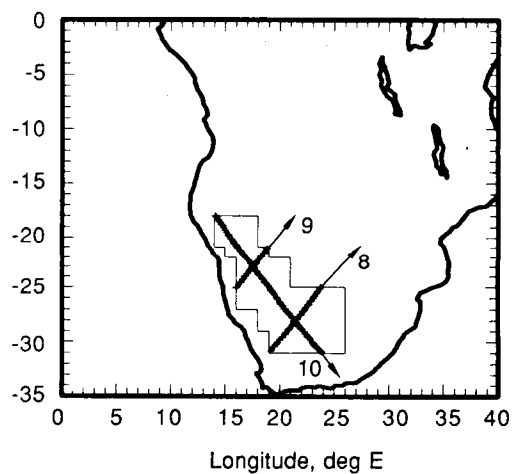
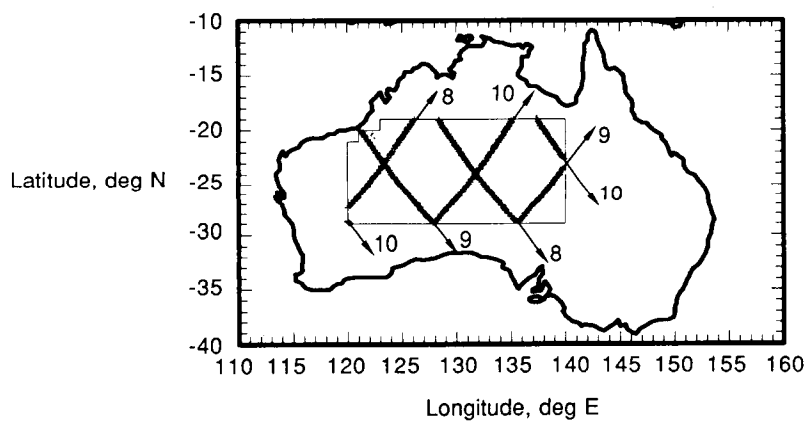
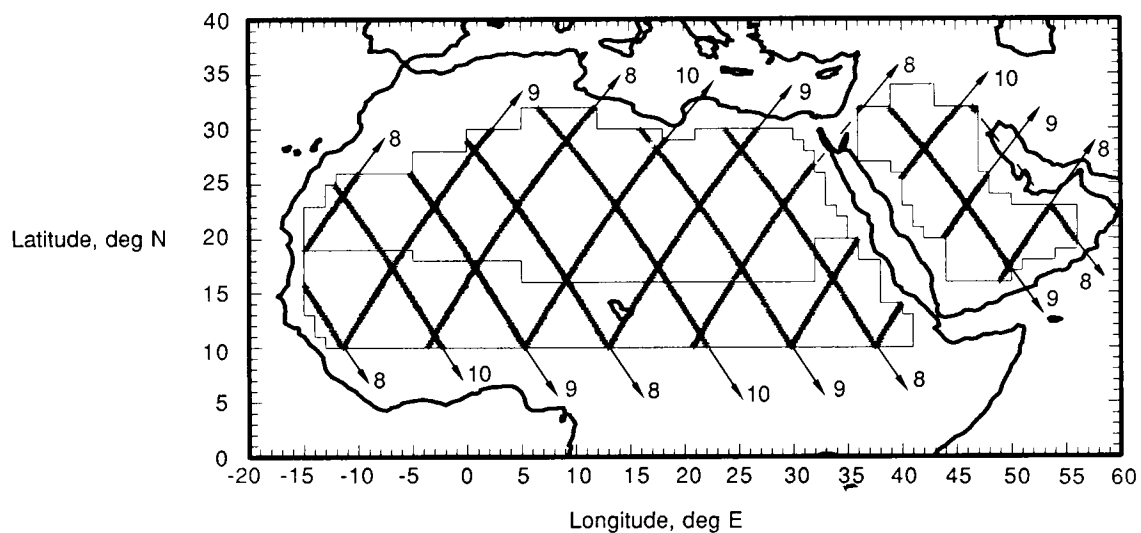
(c) January 23-25, 1985.

Figure 1. Continued.



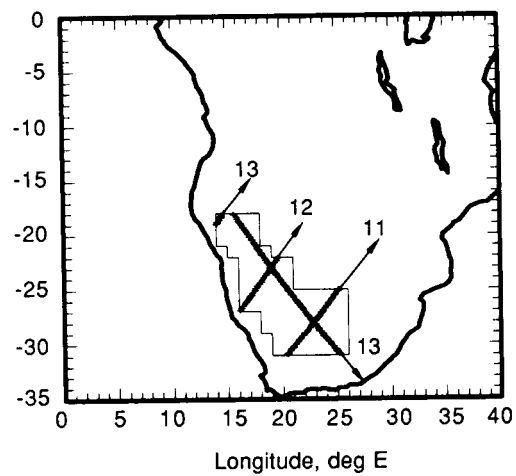
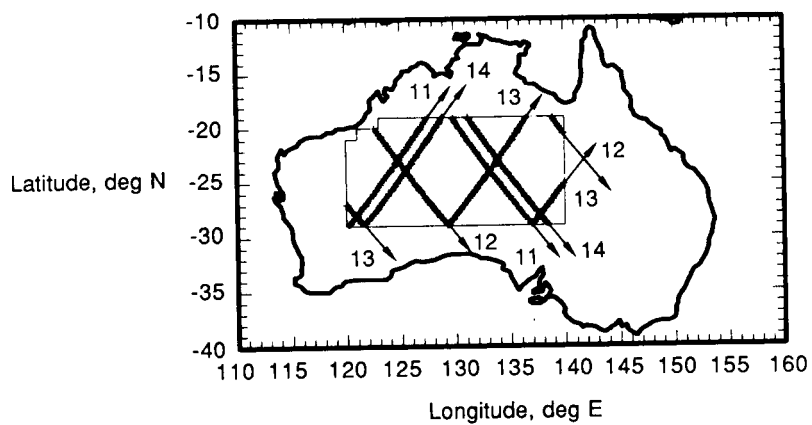
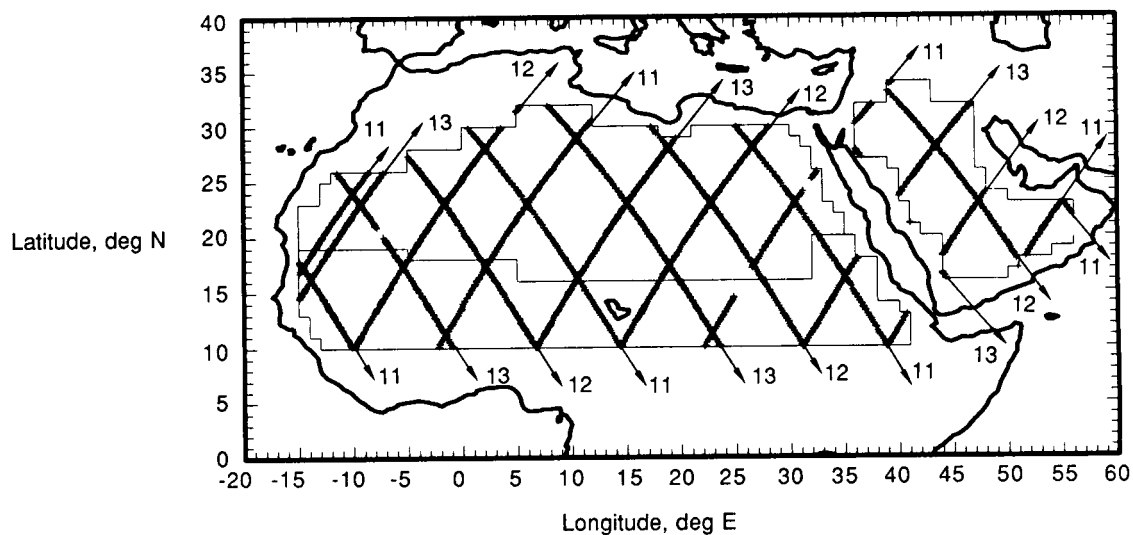
(d) January 26-28, 1985.

Figure 1. Continued.



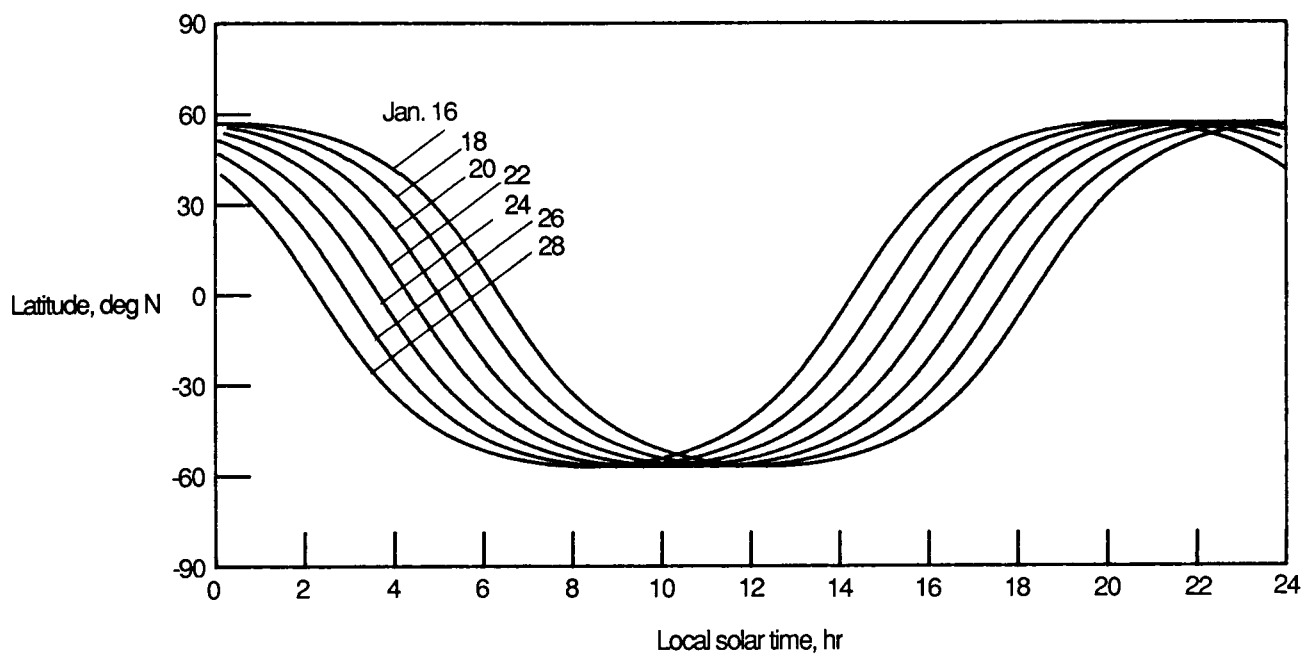
(e) August 8-10, 1985.

Figure 1. Continued.

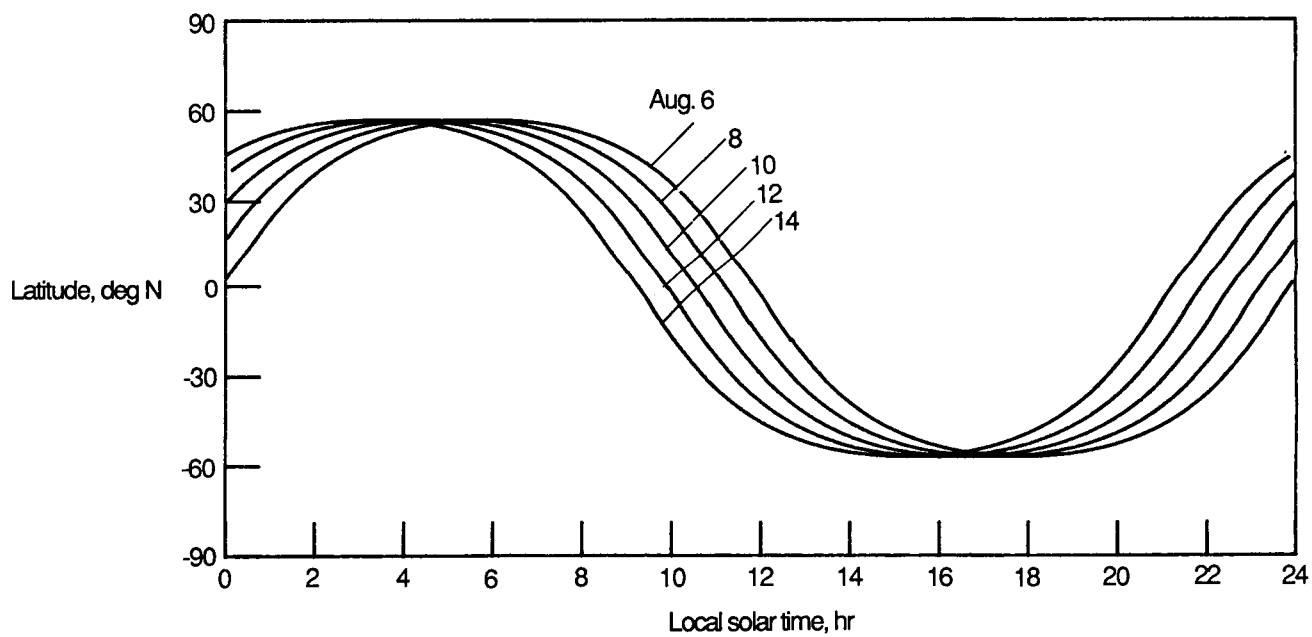


(f) August 11-14, 1985.

Figure 1. Concluded.



(a) January 1985.



(b) August 1985.

Figure 2. Latitude vs. local time for ERBS orbits in January and August 1985.

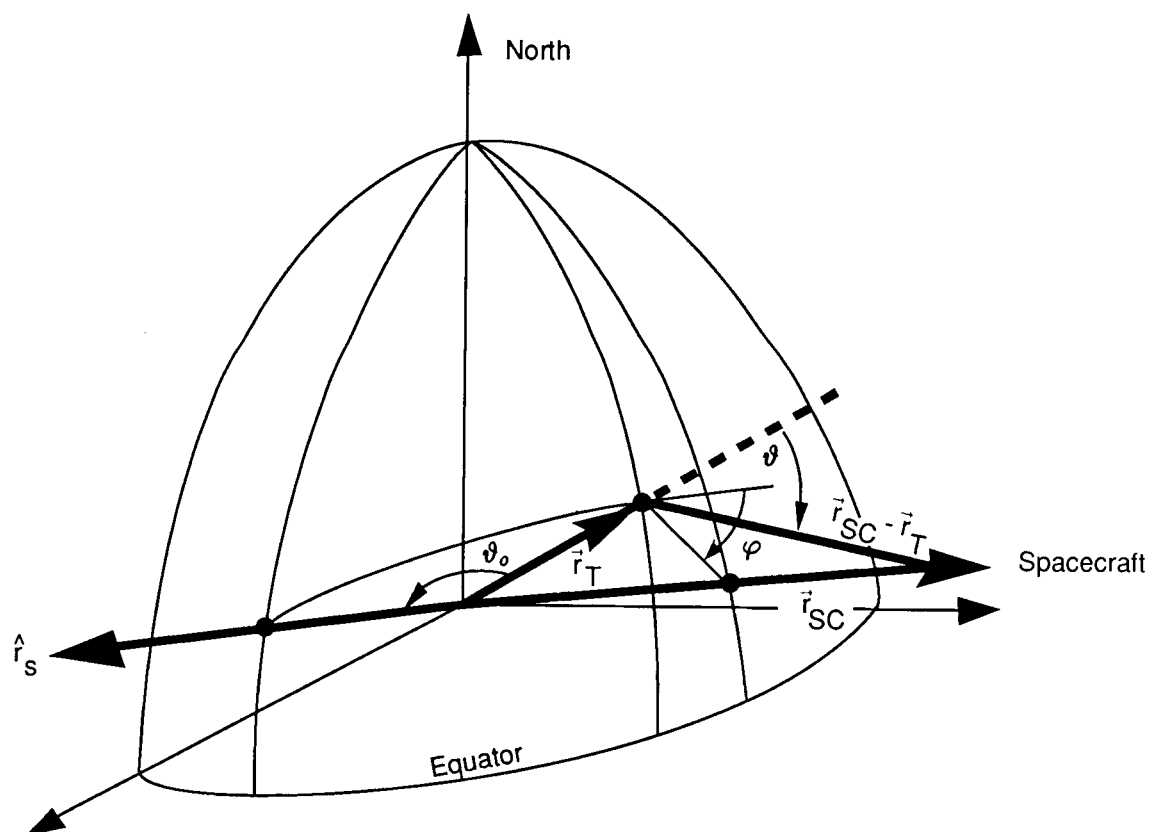


Figure 3. Definition of viewing and solar geometry angles for analysis of ERBE data.

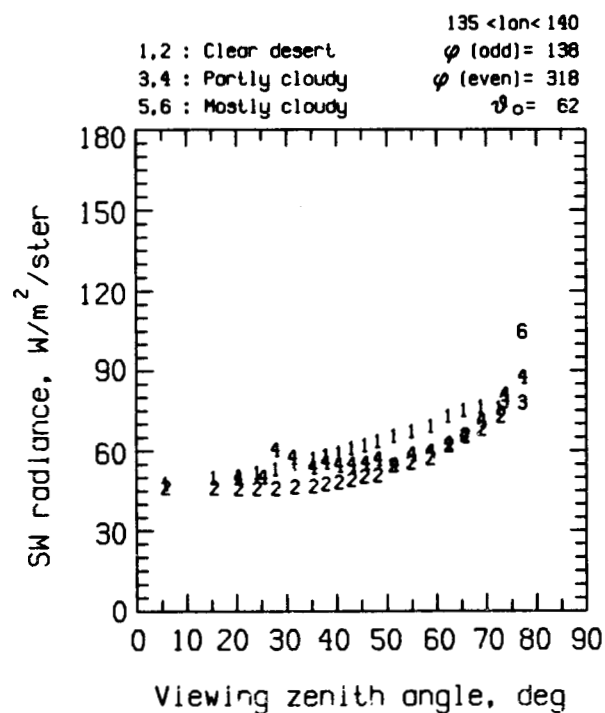


Figure 4.1 Australia, Jan. 17.

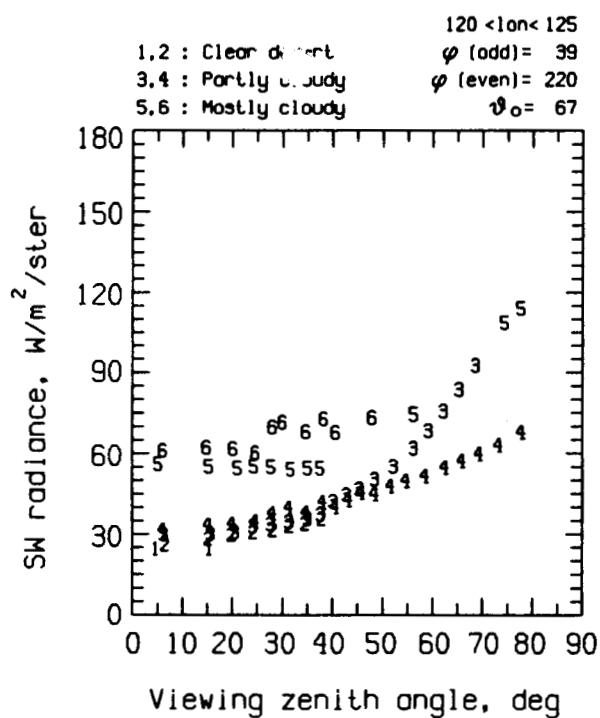


Figure 4.2 Australia, Jan. 17.

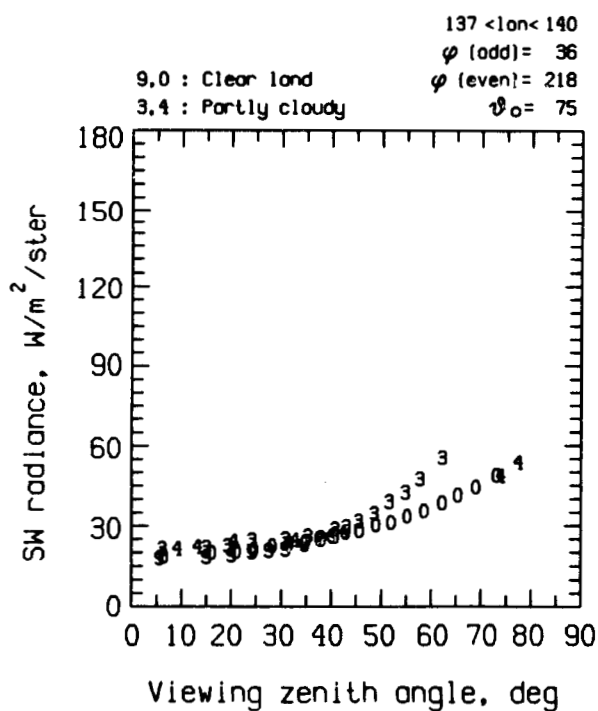


Figure 4.3 Australia, Jan. 17.

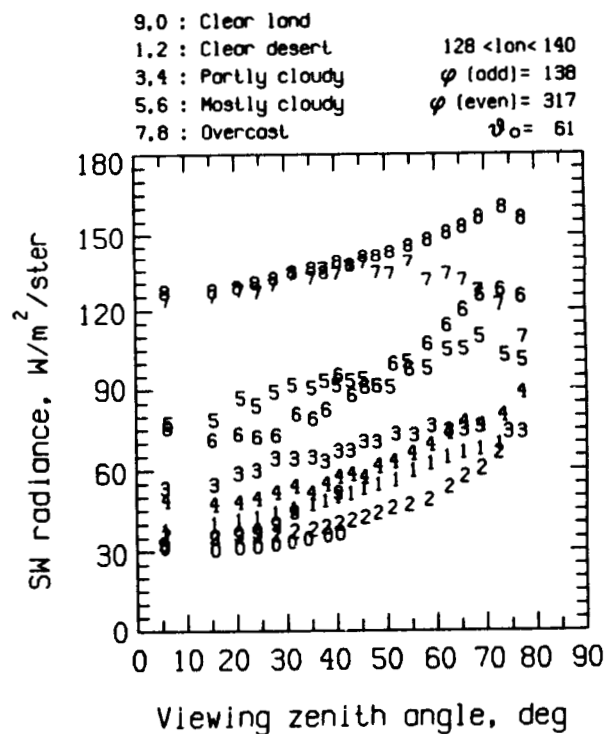


Figure 4.4 Australia, Jan. 18.

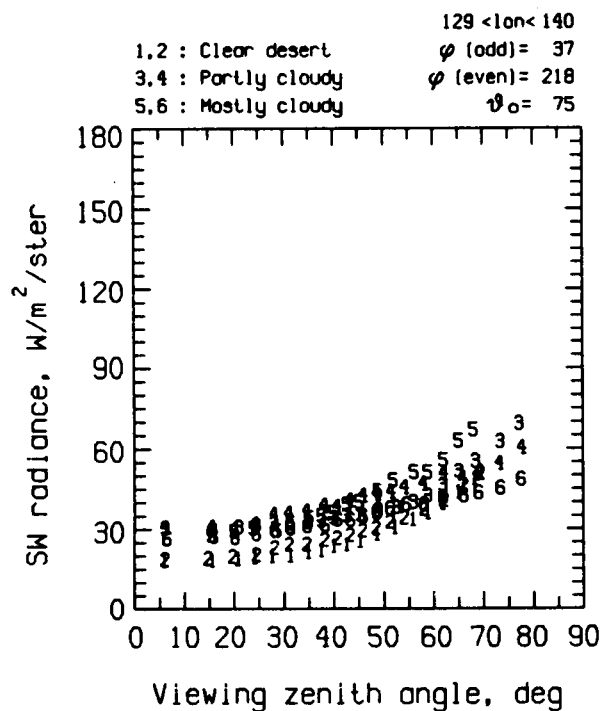


Figure 4.5 Australia, Jan. 18.

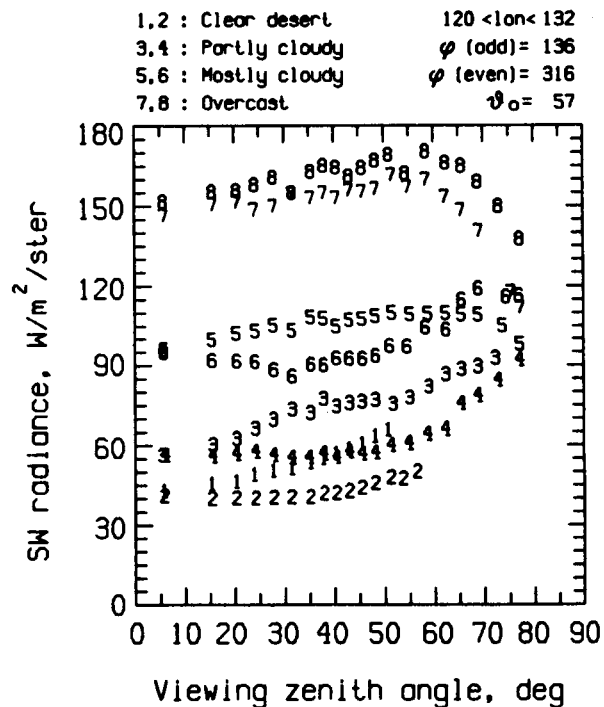


Figure 4.6 Australia, Jan. 19.

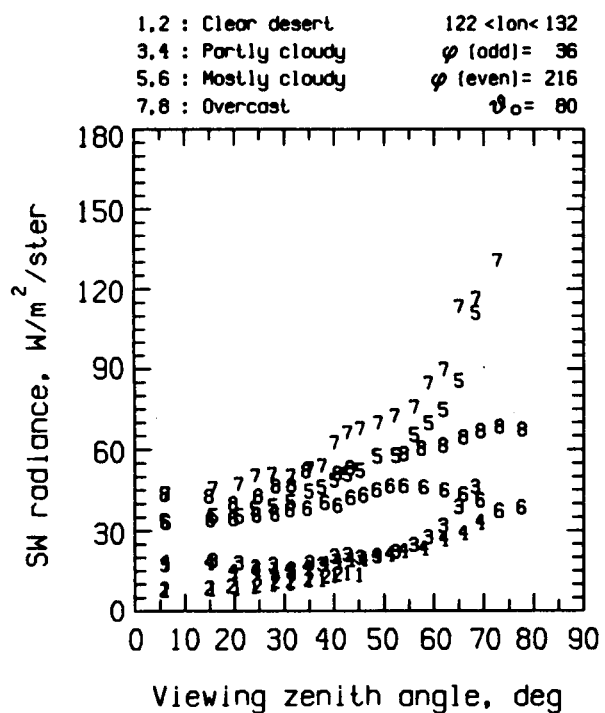


Figure 4.7 Australia, Jan. 19.

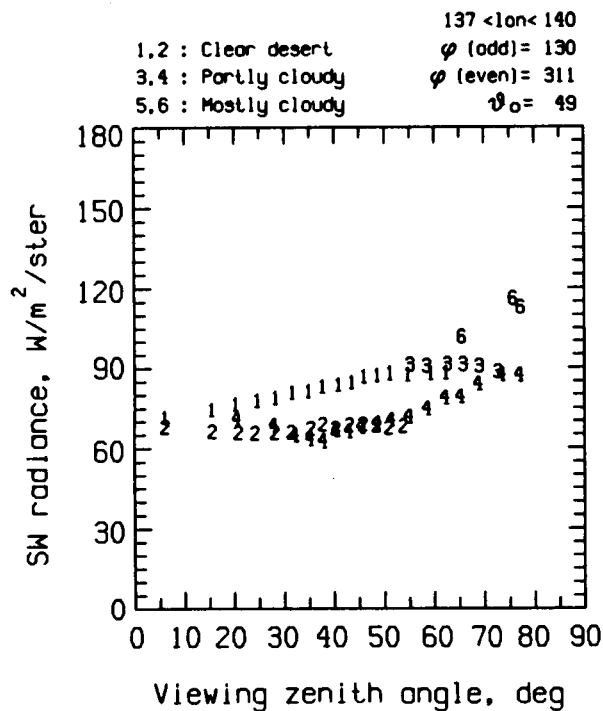


Figure 4.8 Australia, Jan. 20.

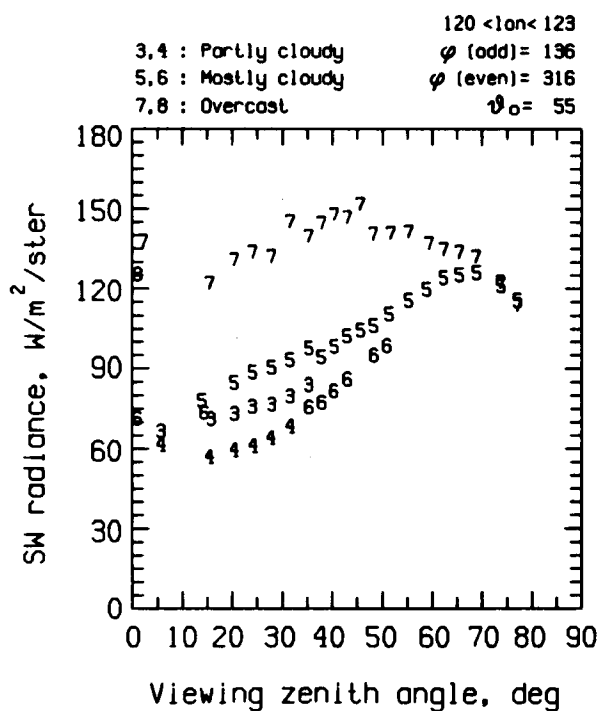


Figure 4.9 Australia, Jan. 20.

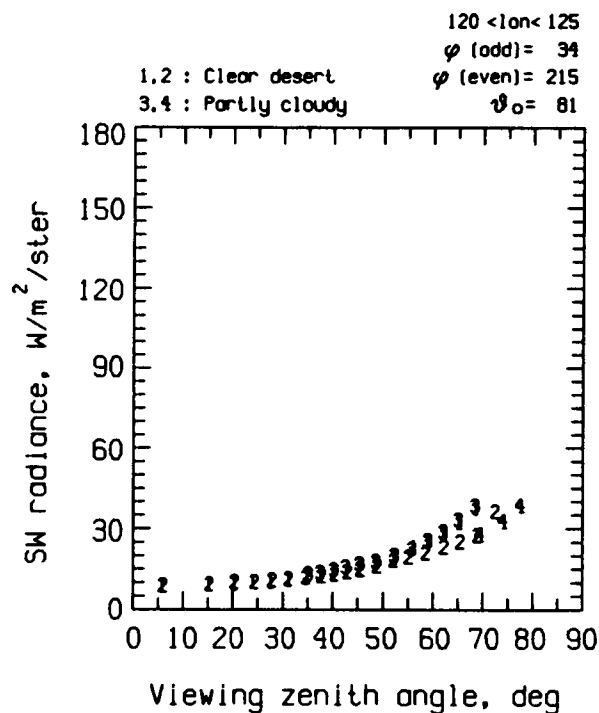


Figure 4.10 Australia, Jan. 20.

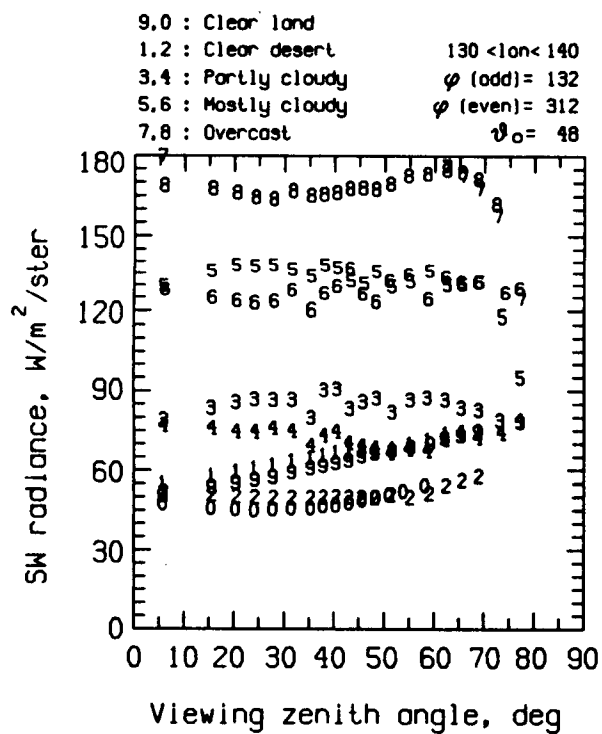


Figure 4.11 Australia, Jan. 21.

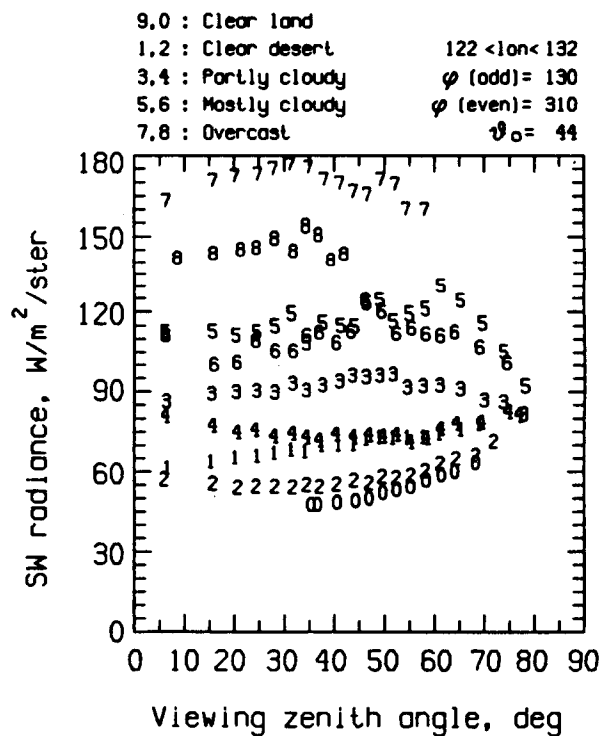


Figure 4.12 Australia, Jan. 22.

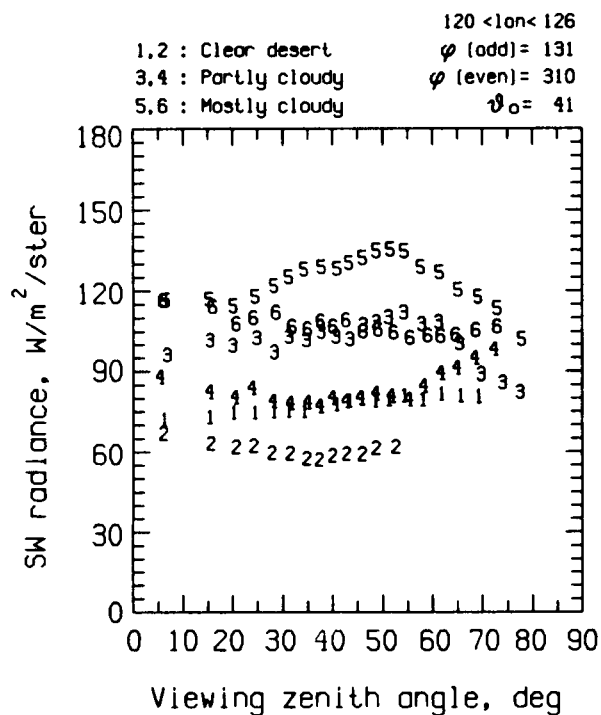


Figure 4.13 Australia, Jan. 23.

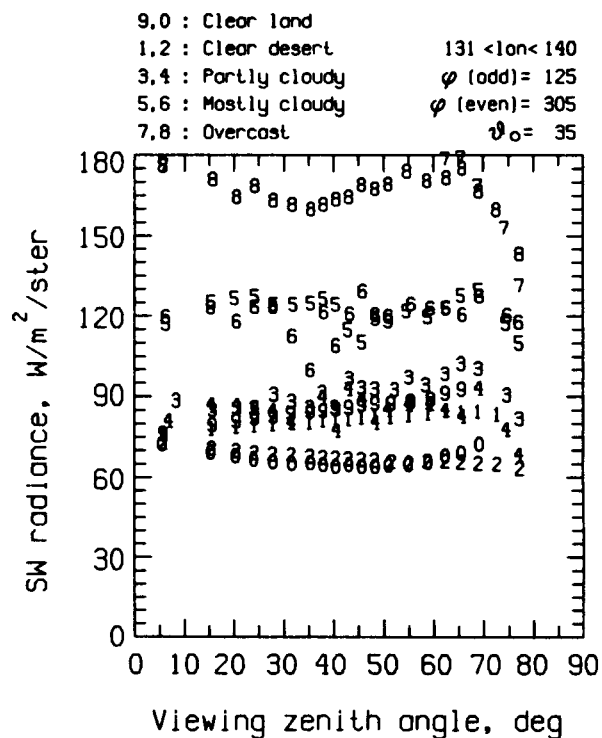


Figure 4.14 Australia, Jan. 24.

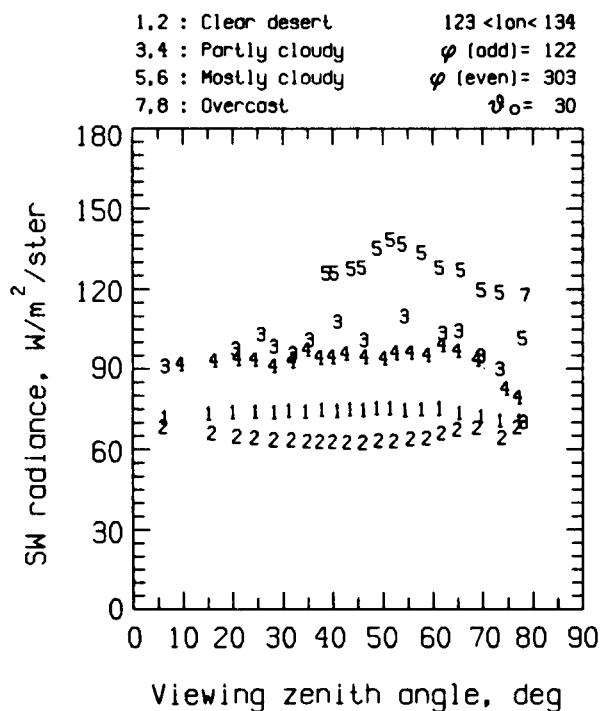


Figure 4.15 Australia, Jan. 25.

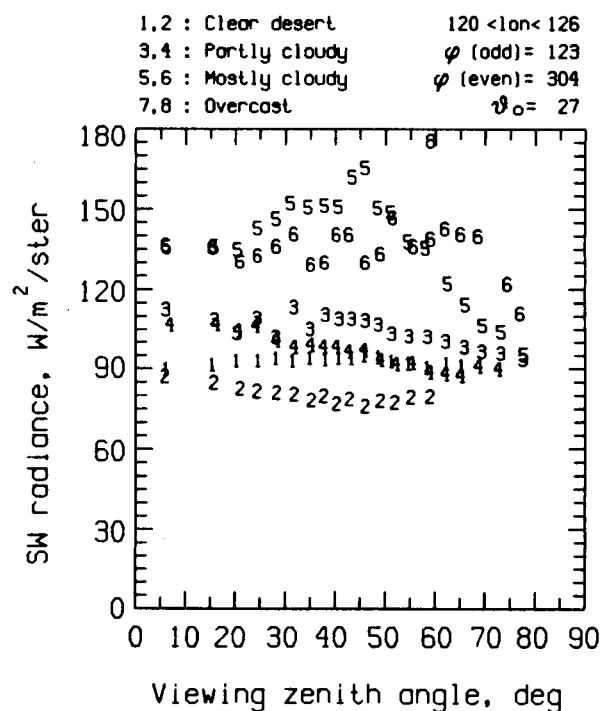


Figure 4.16 Australia, Jan. 26.

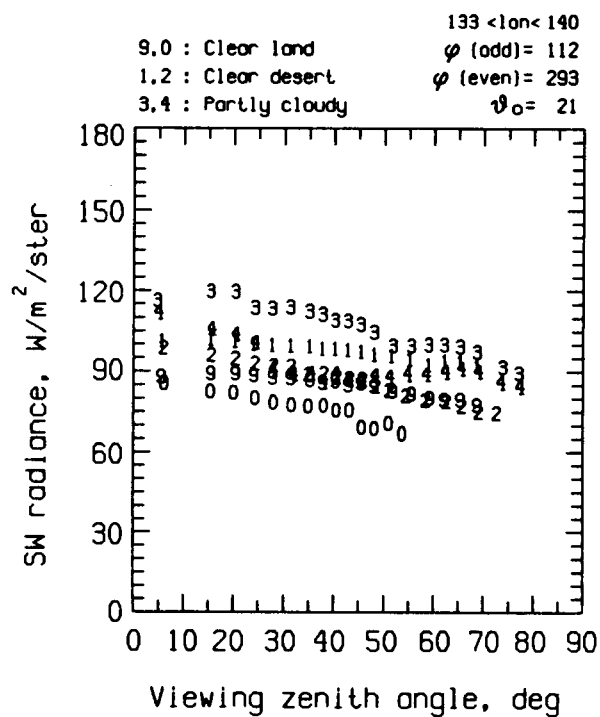


Figure 4.17 Australia, Jan. 27.

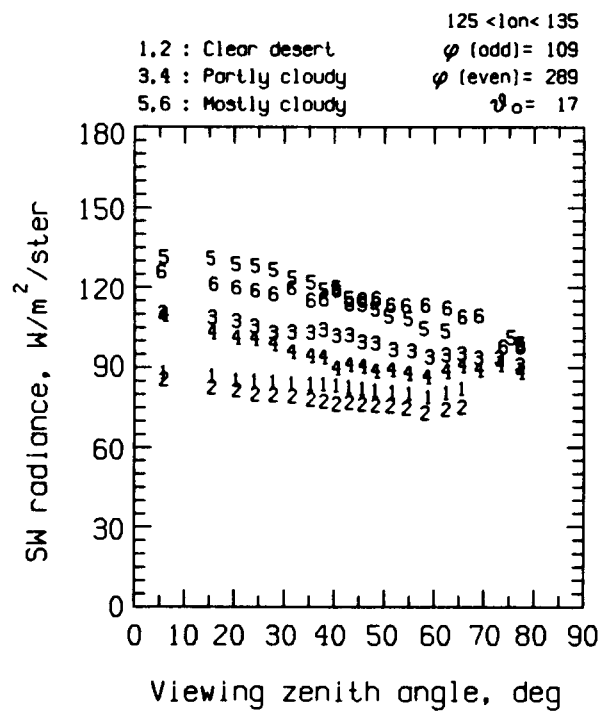


Figure 4.18 Australia, Jan. 28.

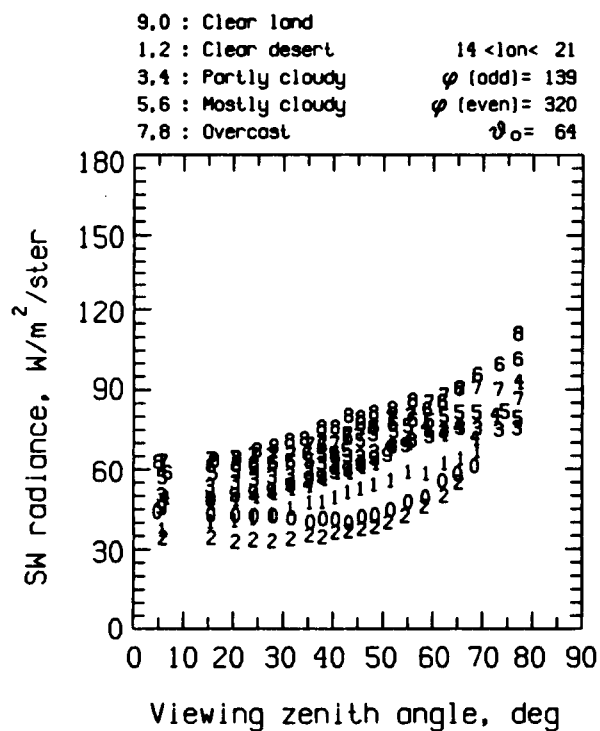


Figure 4.19 Kalahari, Jan. 17.

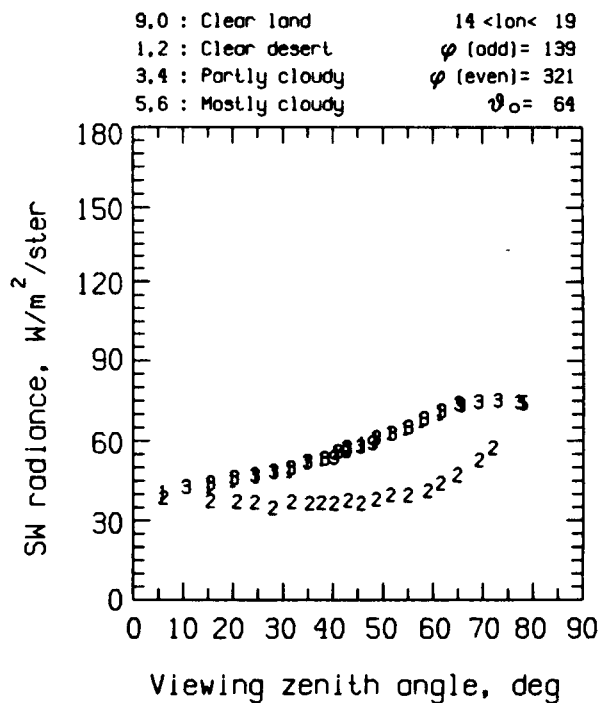


Figure 4.20 Kalahari, Jan. 18.

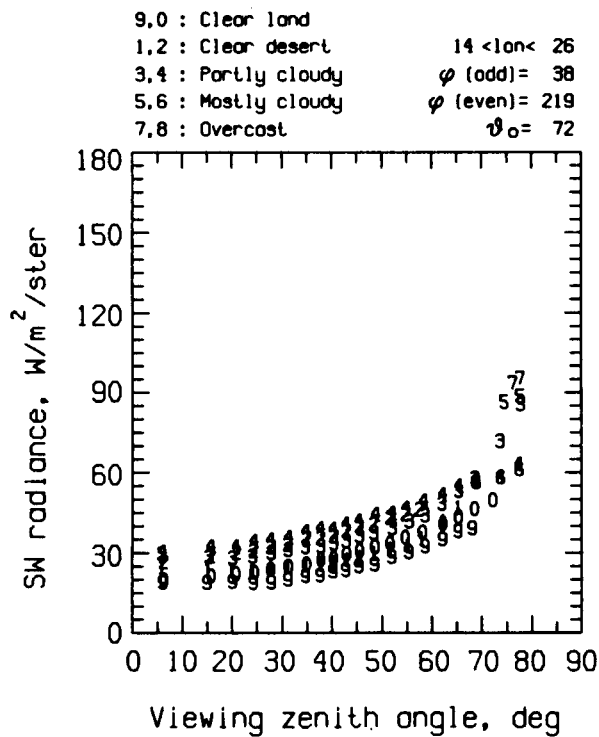


Figure 4.21 Kalahari, Jan. 18.

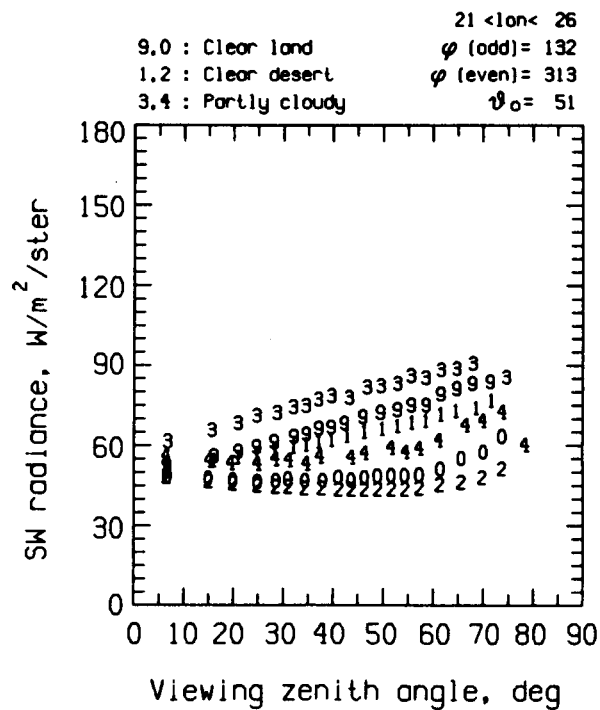


Figure 4.22 Kalahari, Jan. 19.

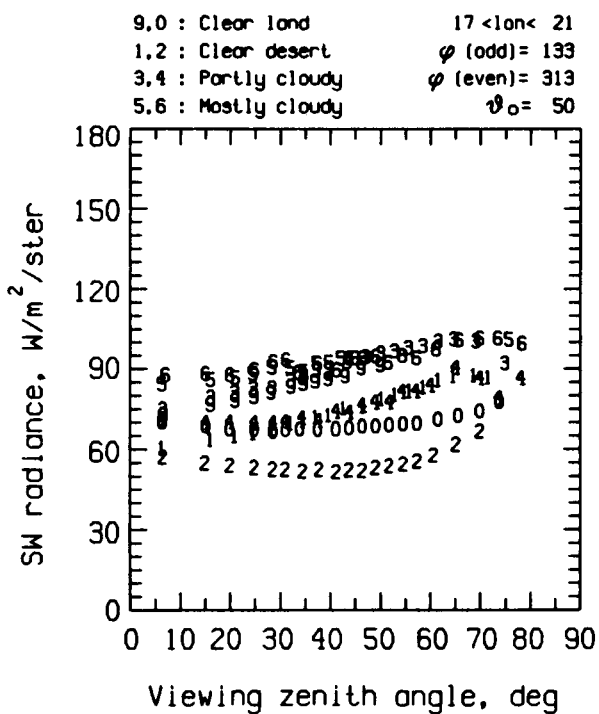


Figure 4.23 Kalahari, Jan. 20.

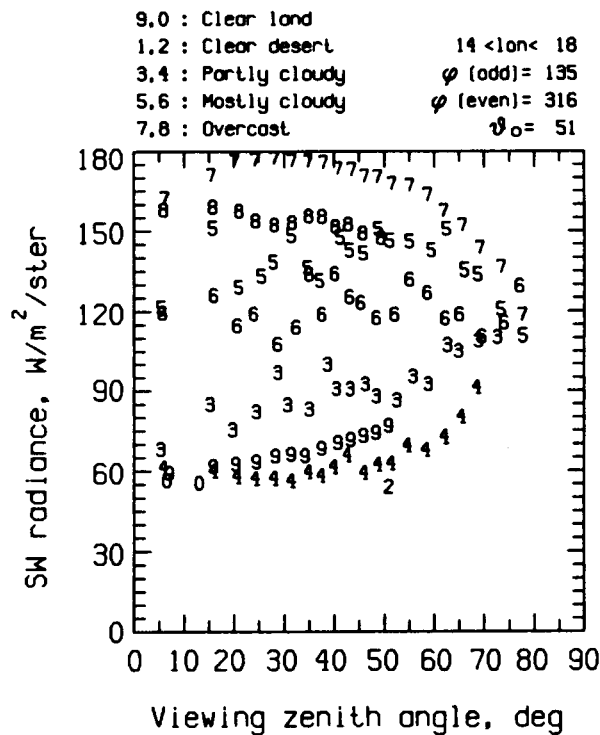


Figure 4.24 Kalahari, Jan. 21.

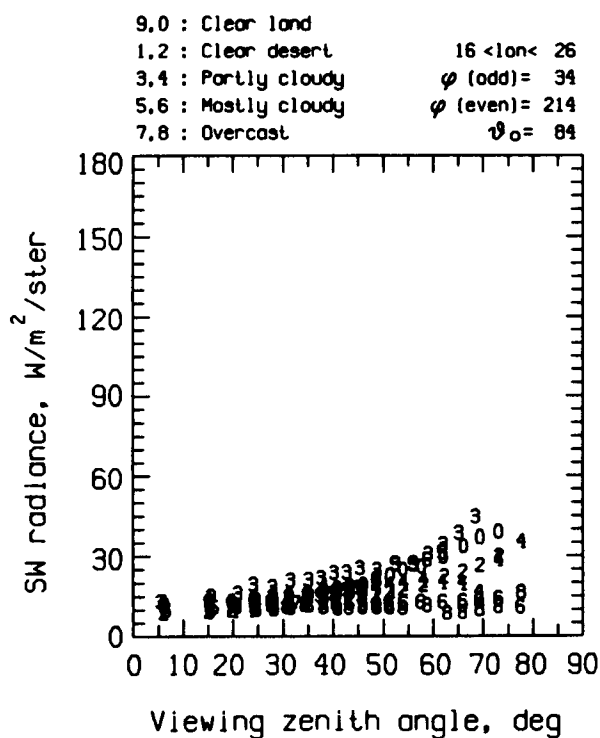


Figure 4.25 Kalahari, Jan. 21.

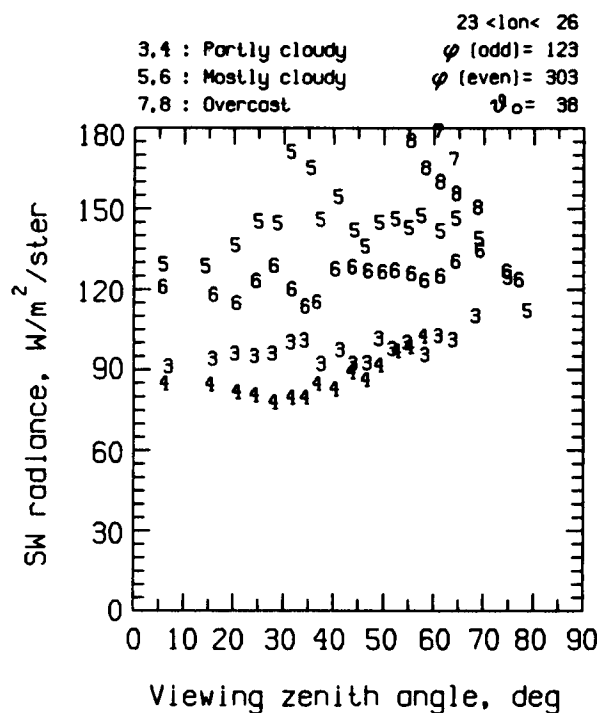


Figure 4.26 Kalahari, Jan. 22.

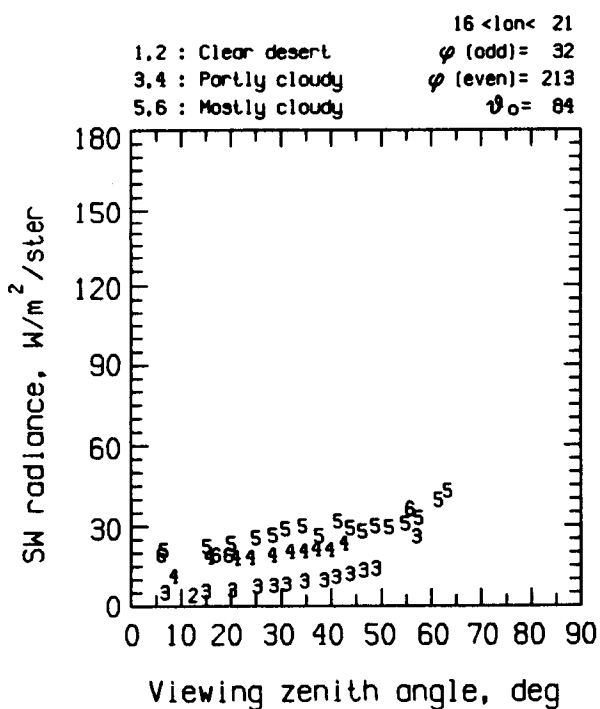


Figure 4.27 Kalahari, Jan. 22.

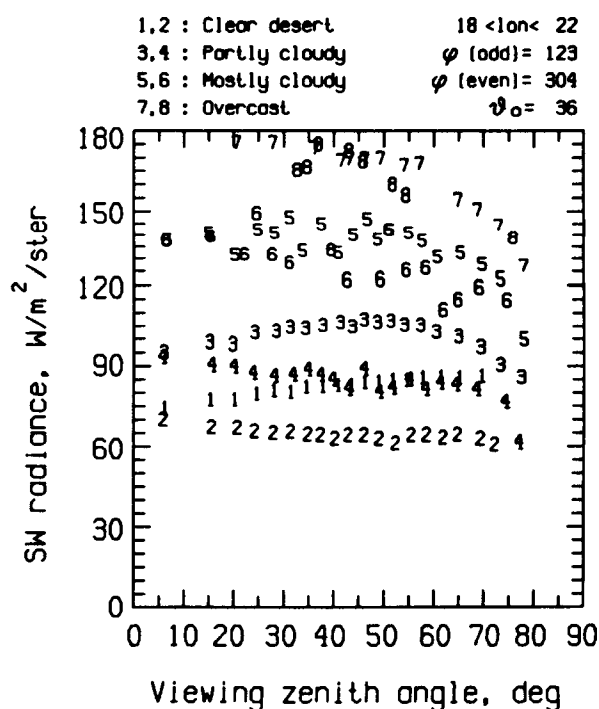


Figure 4.28 Kalahari, Jan. 23.

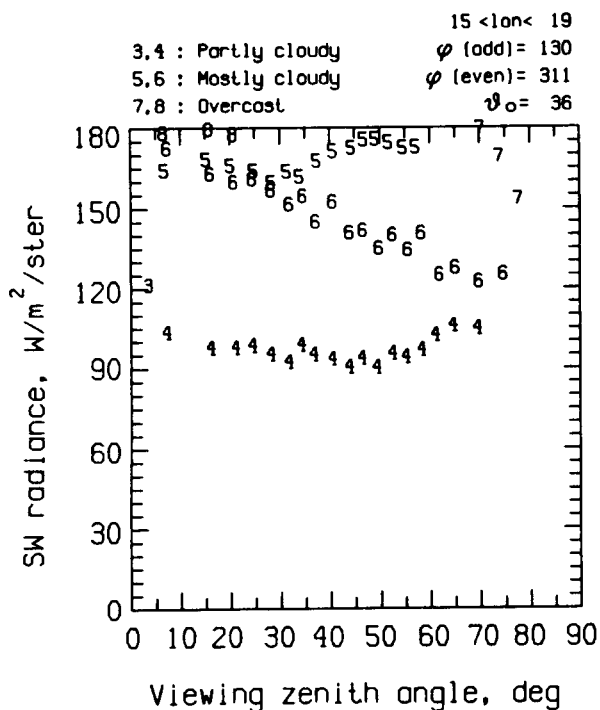


Figure 4.29 Kalahari, Jan. 24.

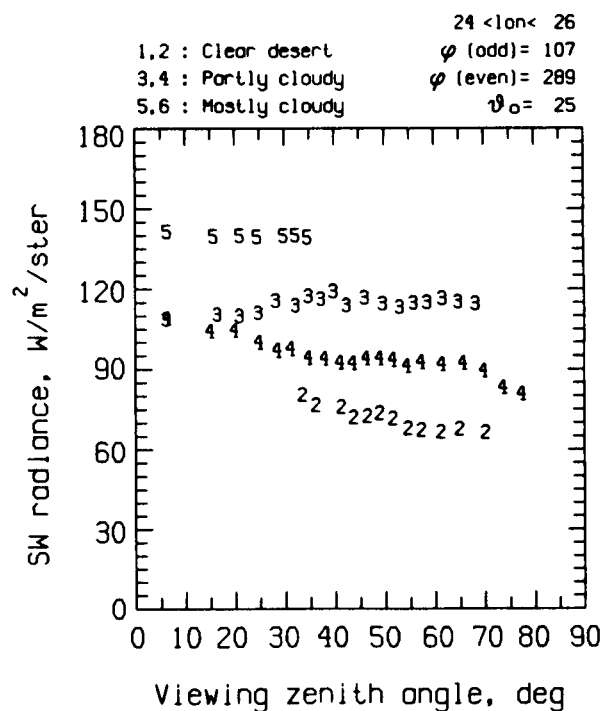


Figure 4.30 Kalahari, Jan. 25.

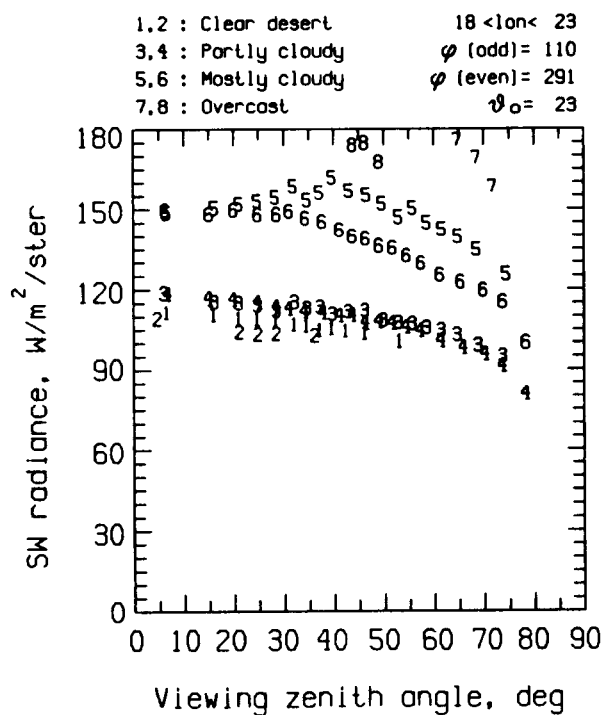


Figure 4.31 Kalahari, Jan. 26.

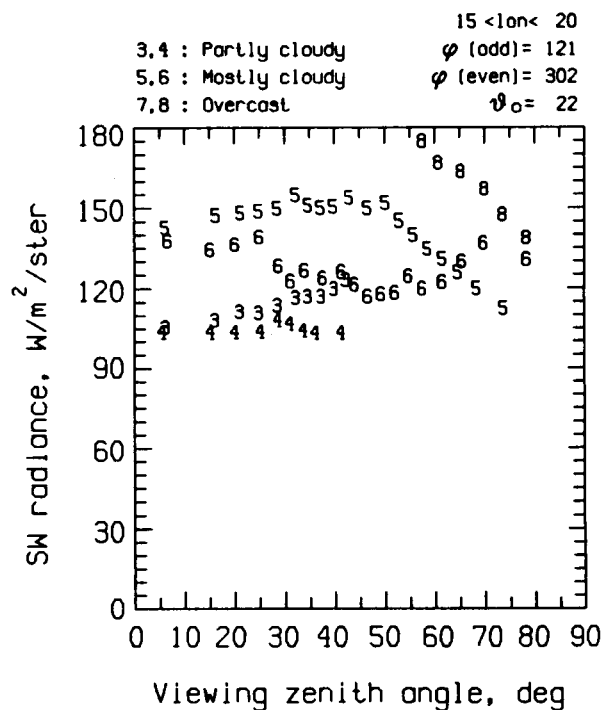


Figure 4.32 Kalahari, Jan. 27.

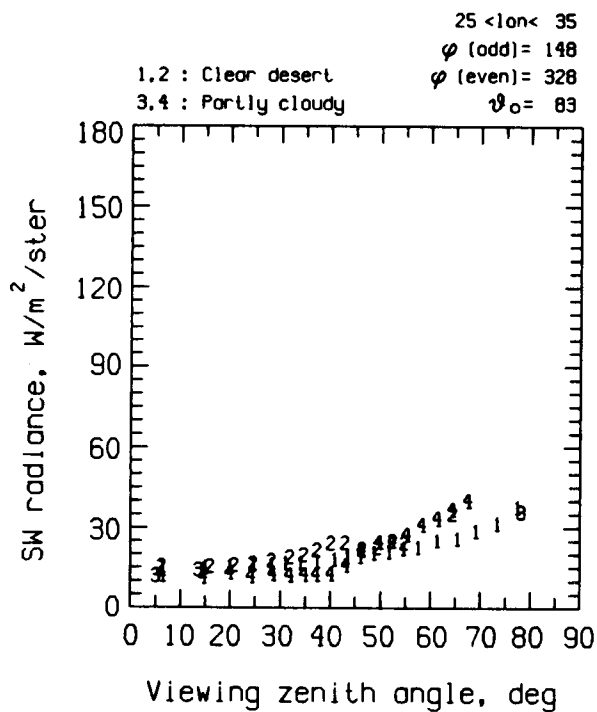


Figure 4.33 Sahara, Jan. 22.

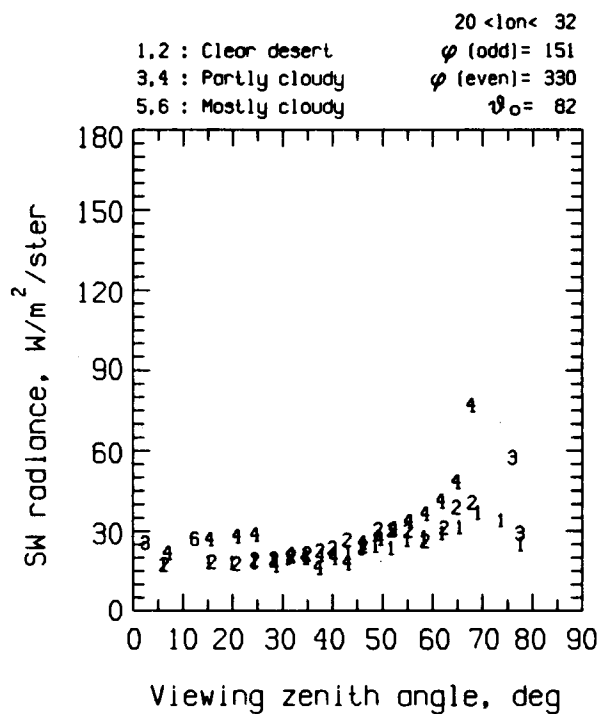


Figure 4.34 Sahara, Jan. 23.

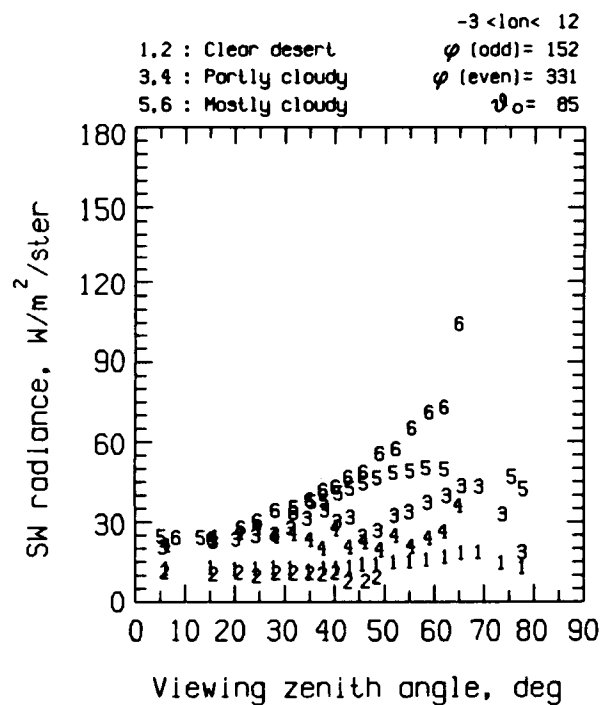


Figure 4.35 Sahara, Jan. 23.

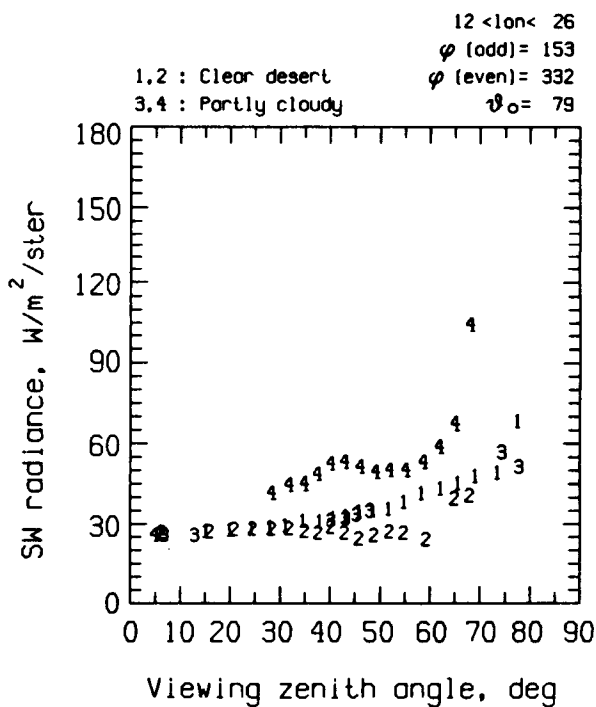


Figure 4.36 Sahara, Jan. 24.

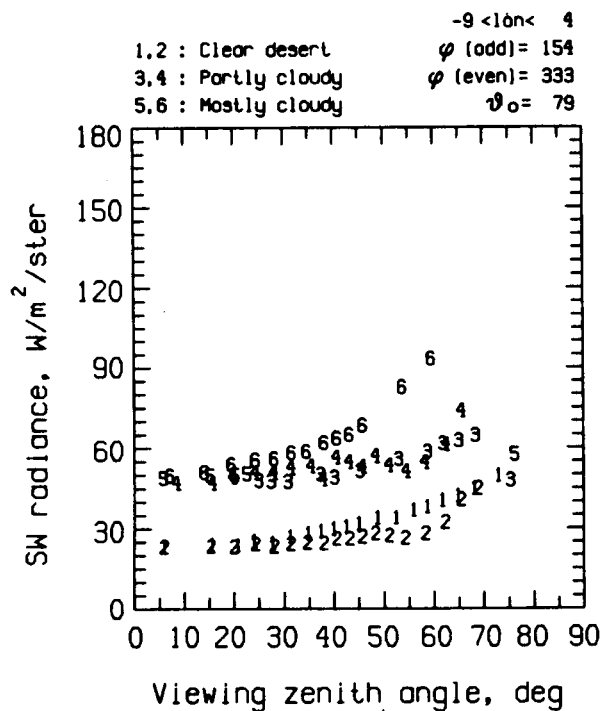


Figure 4.37 Sahara, Jan. 24.

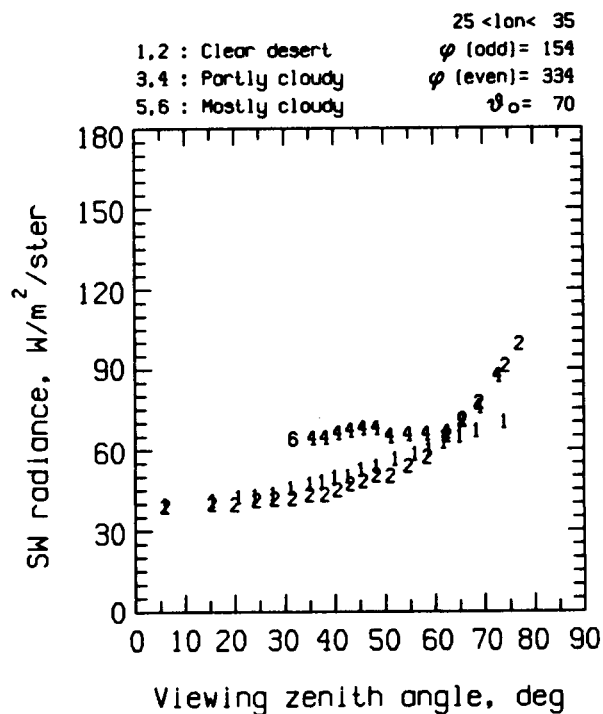


Figure 4.38 Sahara, Jan. 25.

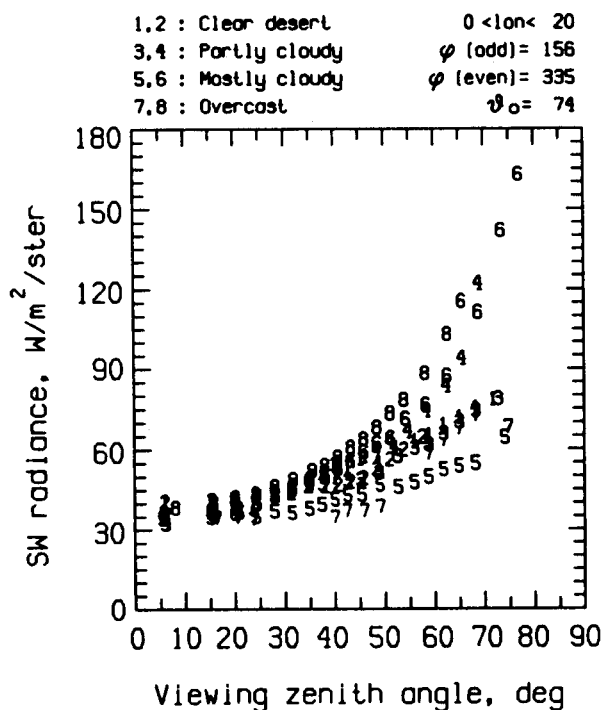


Figure 4.39 Sahara, Jan. 25.

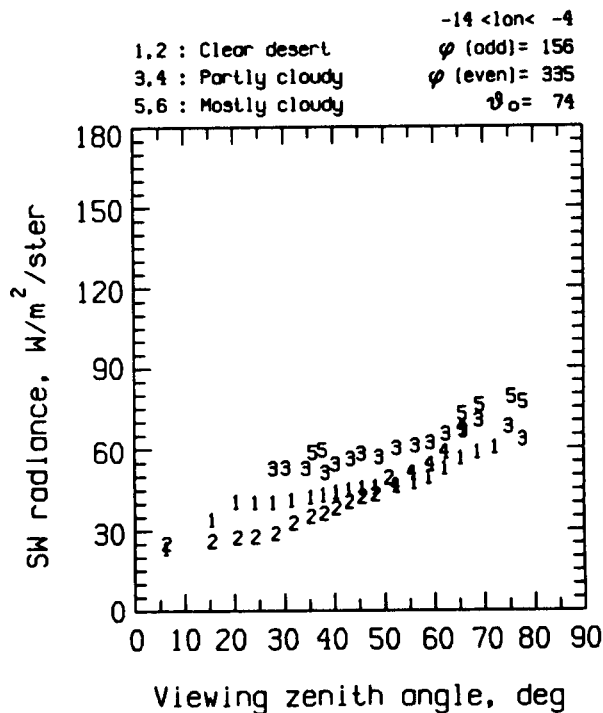


Figure 4.40 Sahara, Jan. 25.

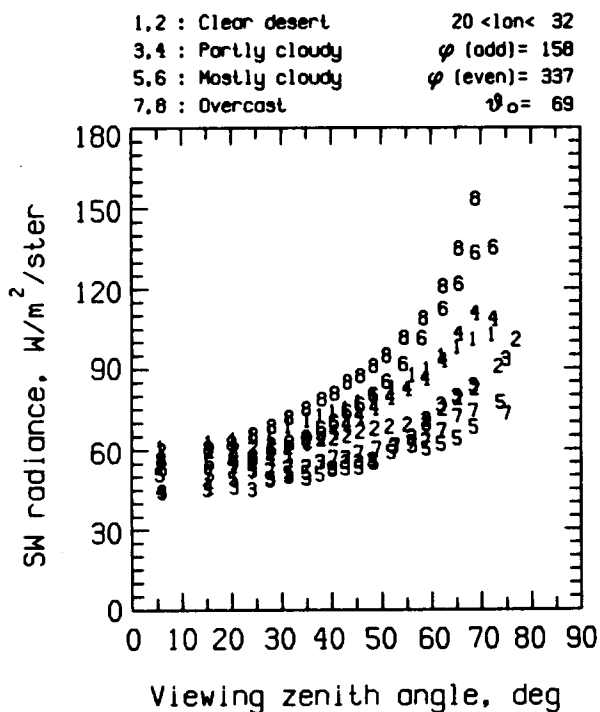


Figure 4.41 Sahara, Jan. 26.

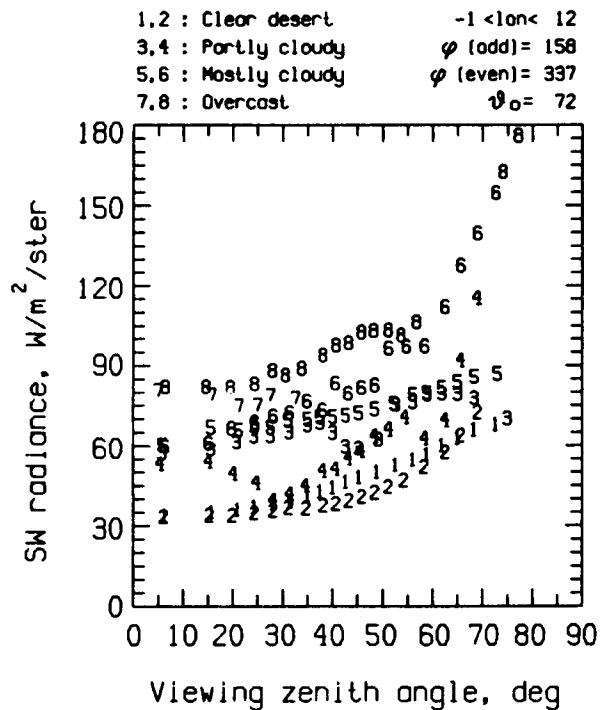


Figure 4.42 Sahara, Jan. 26.

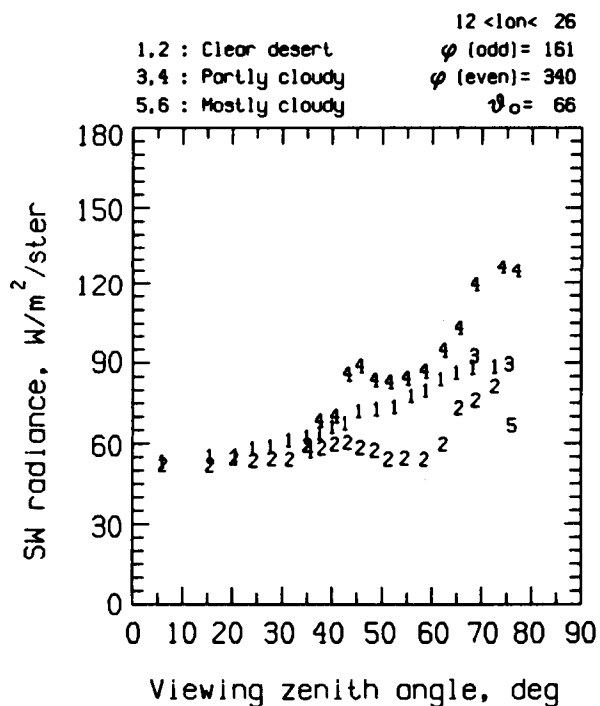


Figure 4.43 Sahara, Jan. 27.

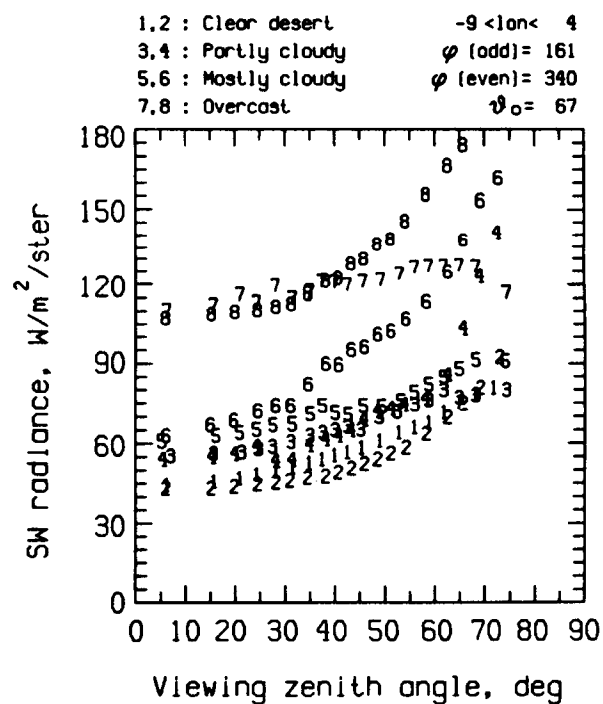


Figure 4.44 Sahara, Jan. 27.

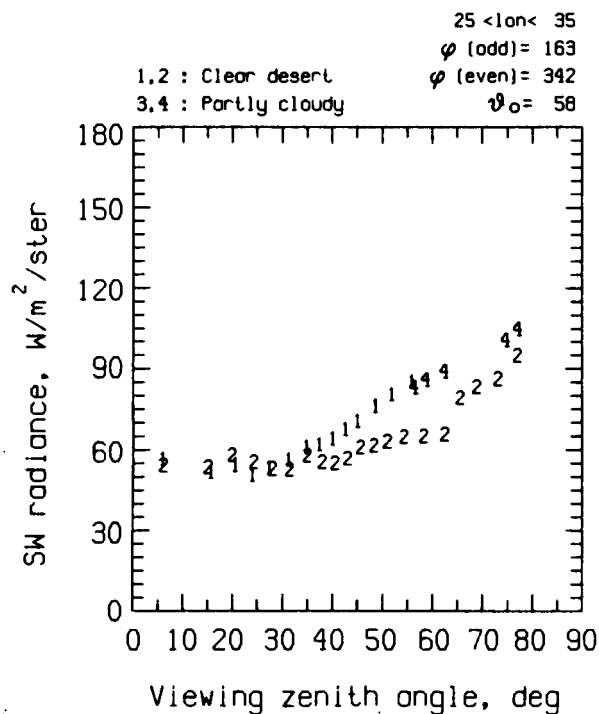


Figure 4.45 Sahara, Jan. 28.

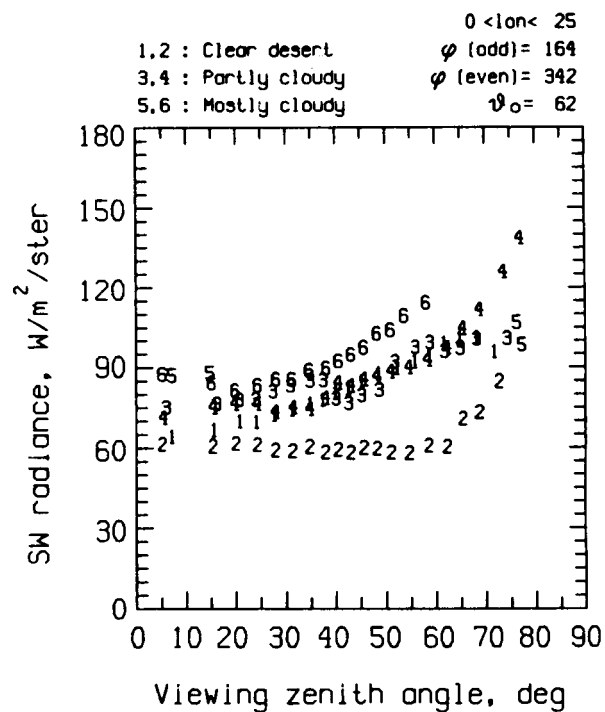


Figure 4.46 Sahara, Jan. 28.

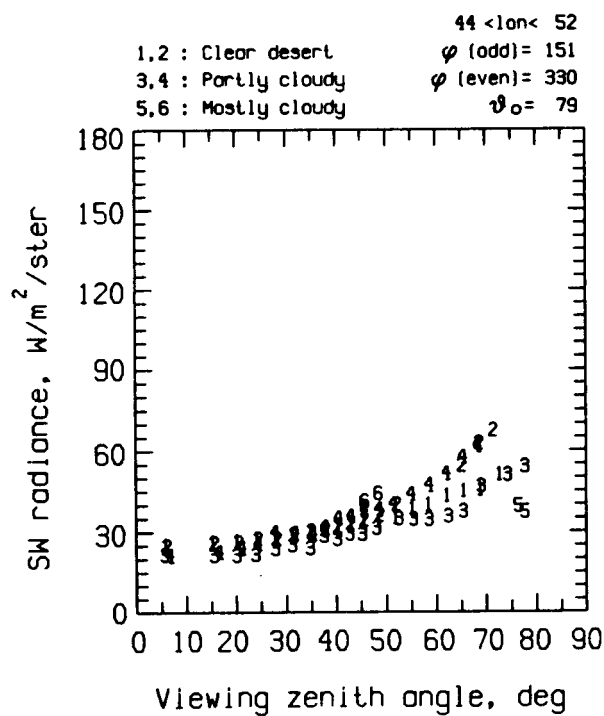


Figure 4.47 Arabian peninsula, Jan. 23.

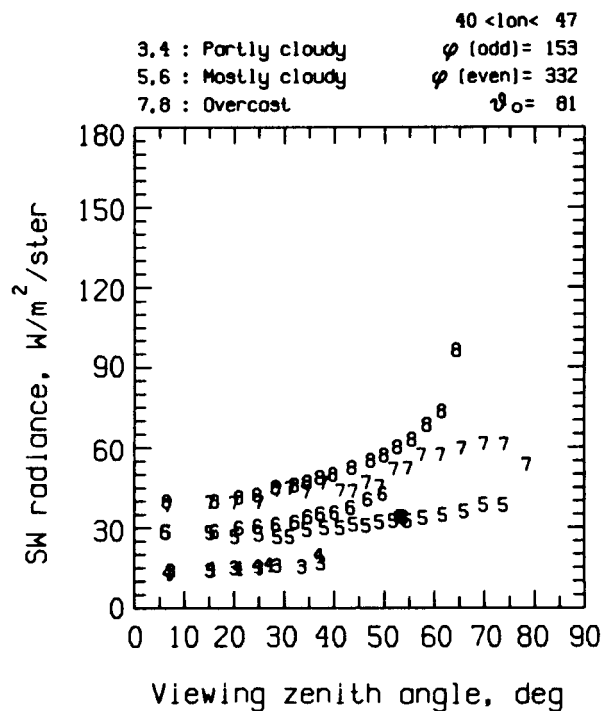


Figure 4.48 Arabian peninsula, Jan. 24.

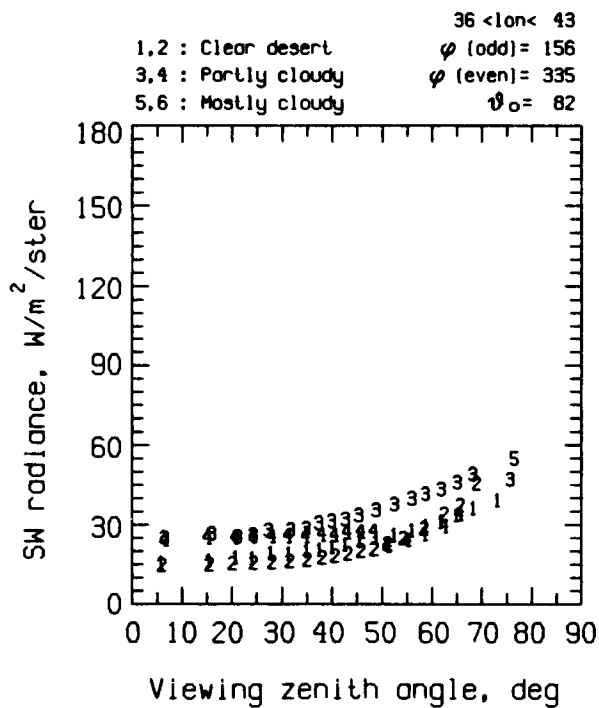


Figure 4.49 Arabian peninsula, Jan. 25.

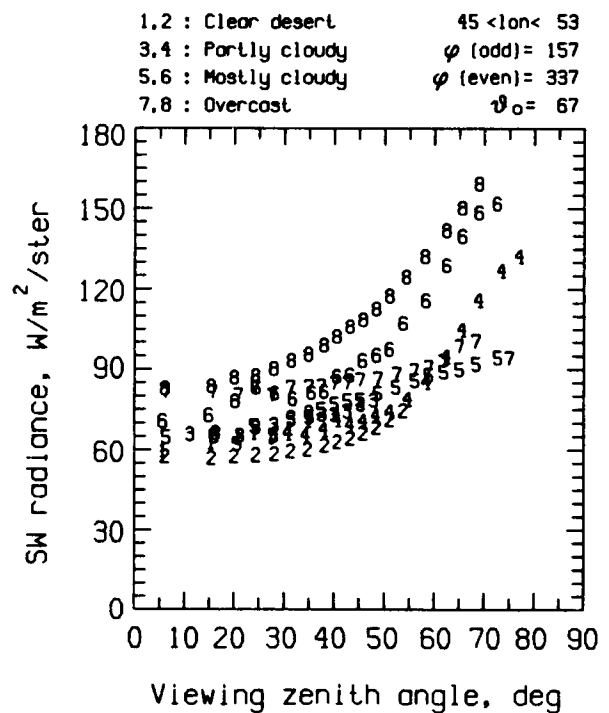


Figure 4.50 Arabian peninsula, Jan. 26.

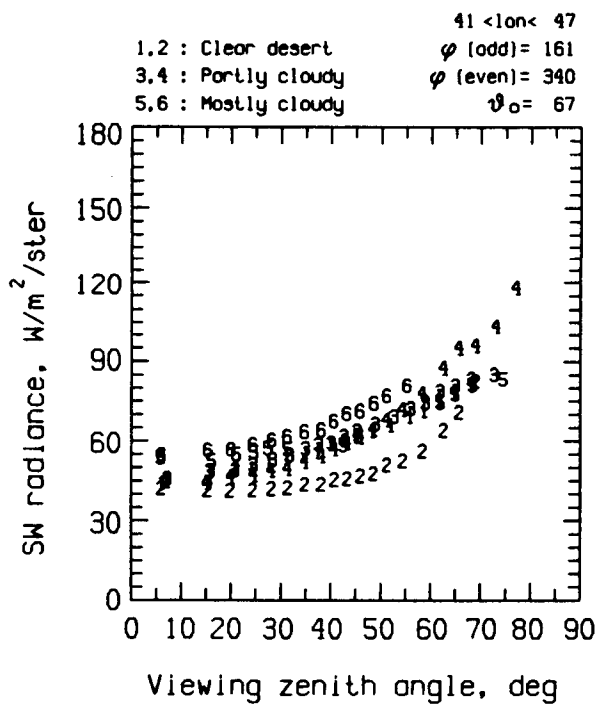


Figure 4.51 Arabian peninsula, Jan. 27.

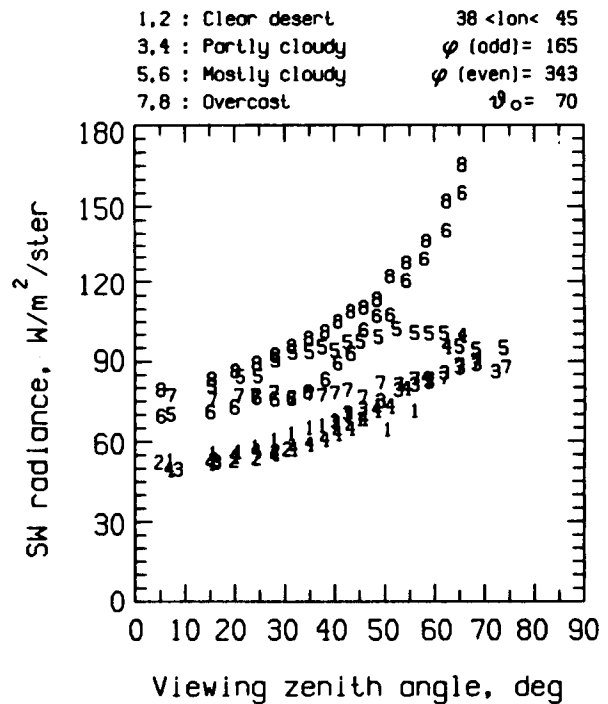


Figure 4.52 Arabian peninsula, Jan. 28.

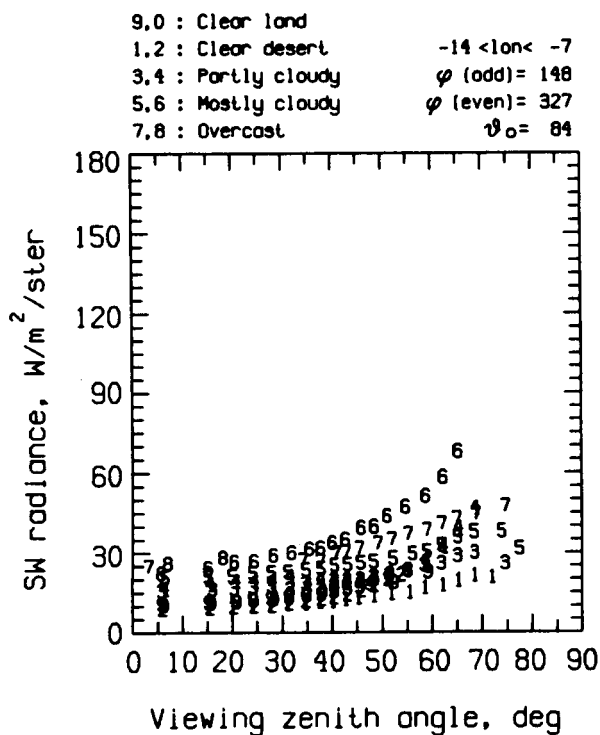


Figure 4.53 Sahel, Jan. 21.

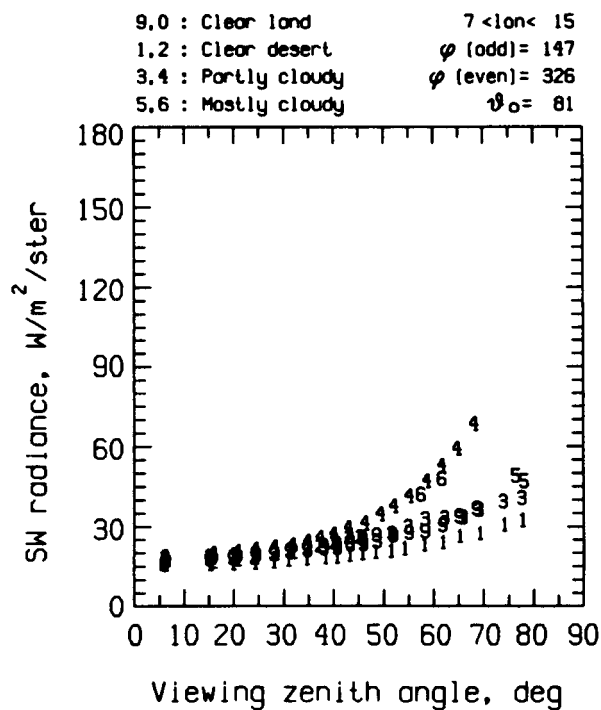


Figure 4.54 Sahel, Jan. 21.

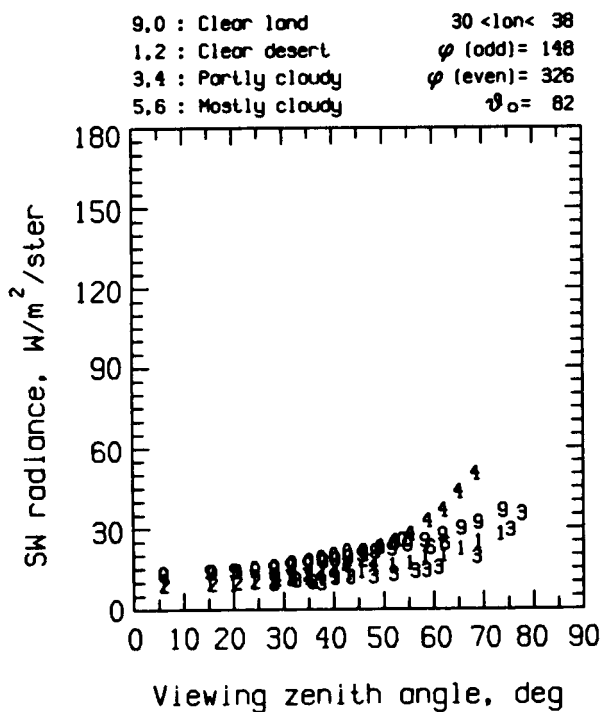


Figure 4.55 Sahel, Jan. 21.

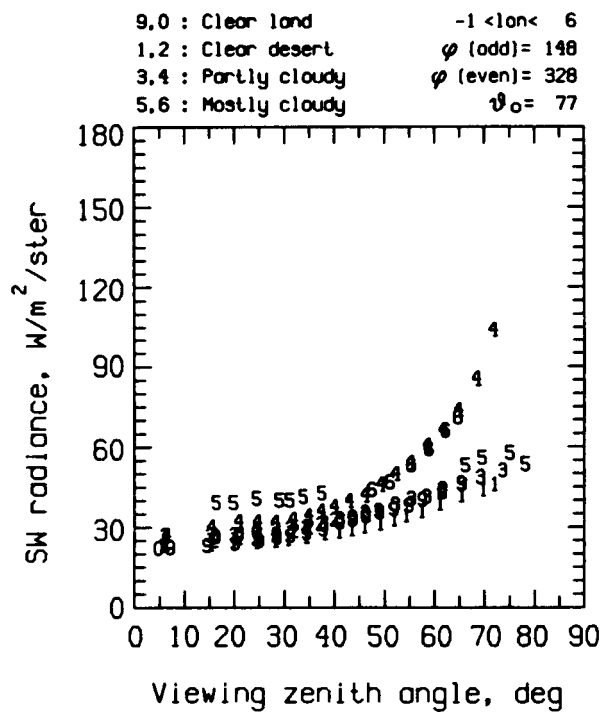


Figure 4.56 Sahel, Jan. 22.

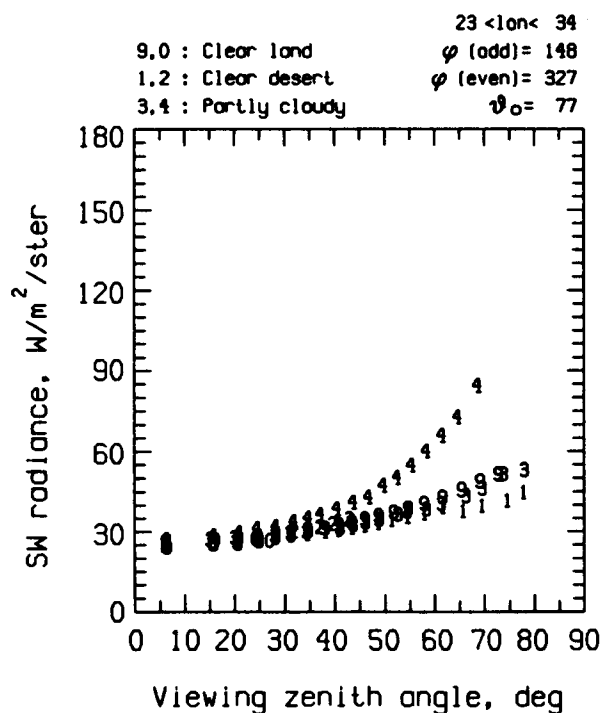


Figure 4.57 Sahel, Jan. 22.

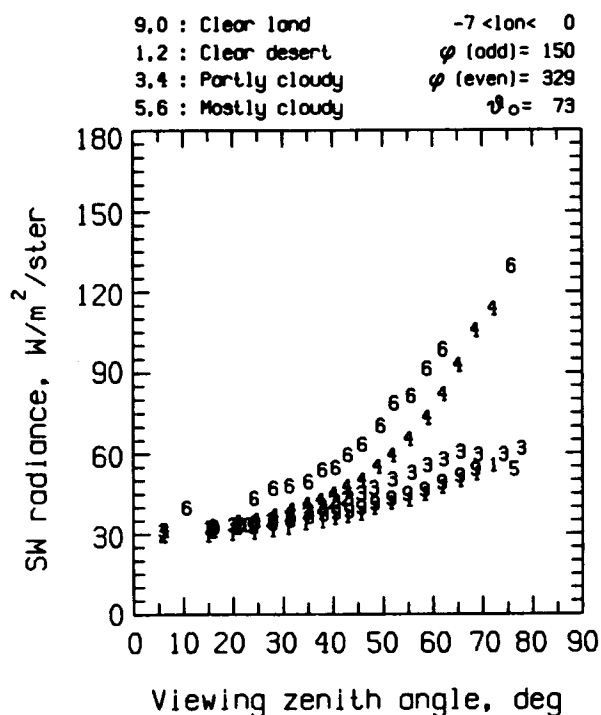


Figure 4.58 Sahel, Jan. 23.

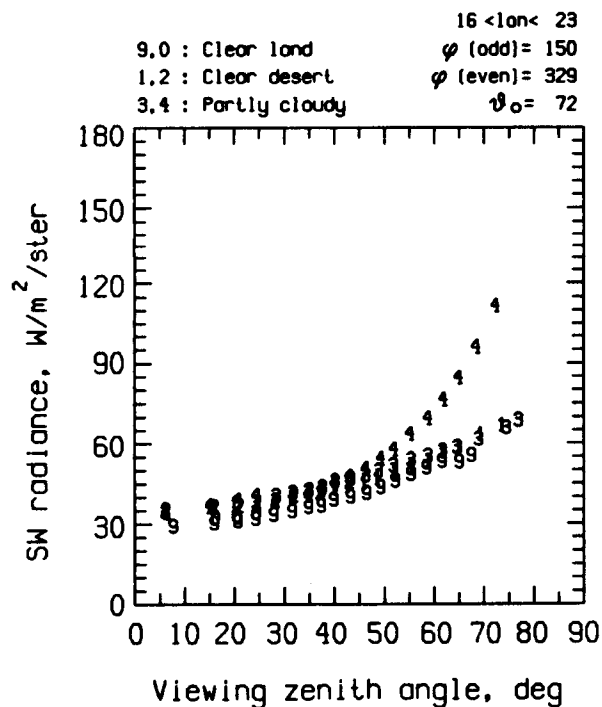


Figure 4.59 Sahel, Jan. 23.

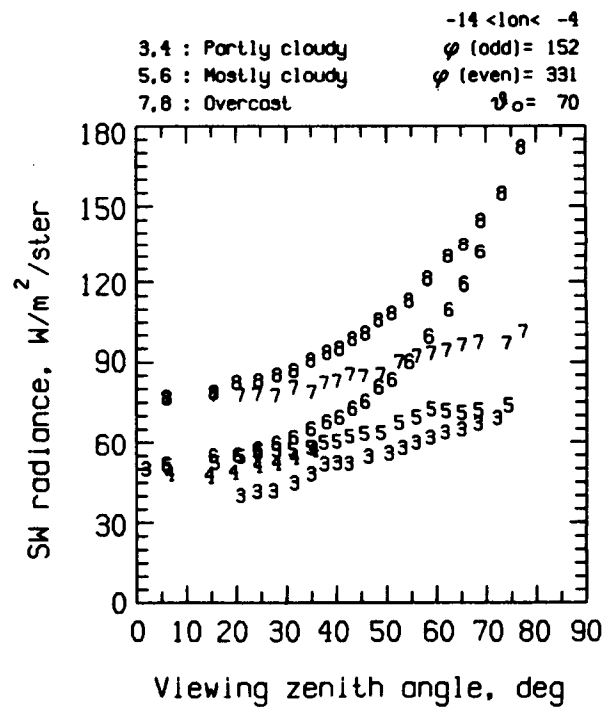


Figure 4.60 Sahel, Jan. 24.

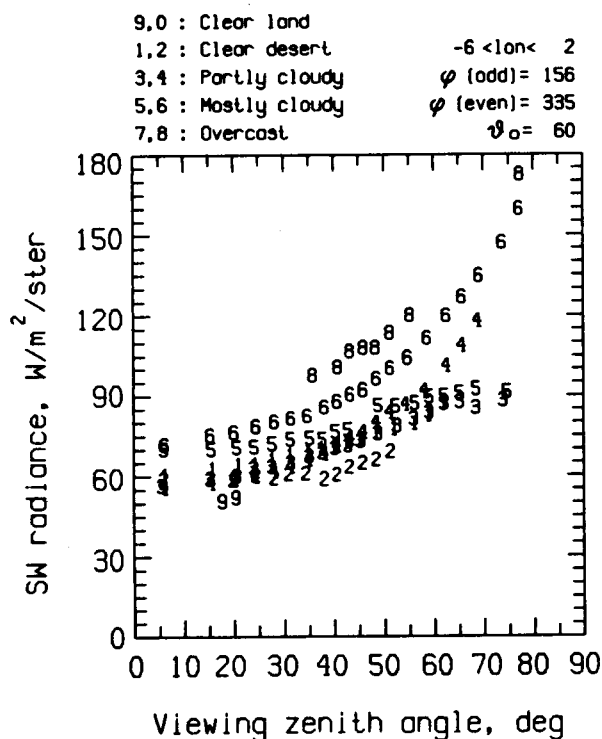


Figure 4.65 Sahel, Jan. 26.

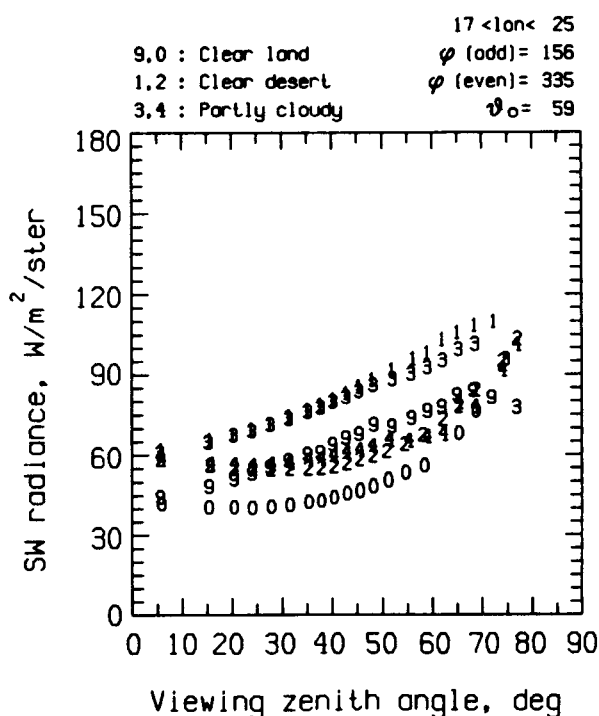


Figure 4.66 Sahel, Jan. 26.

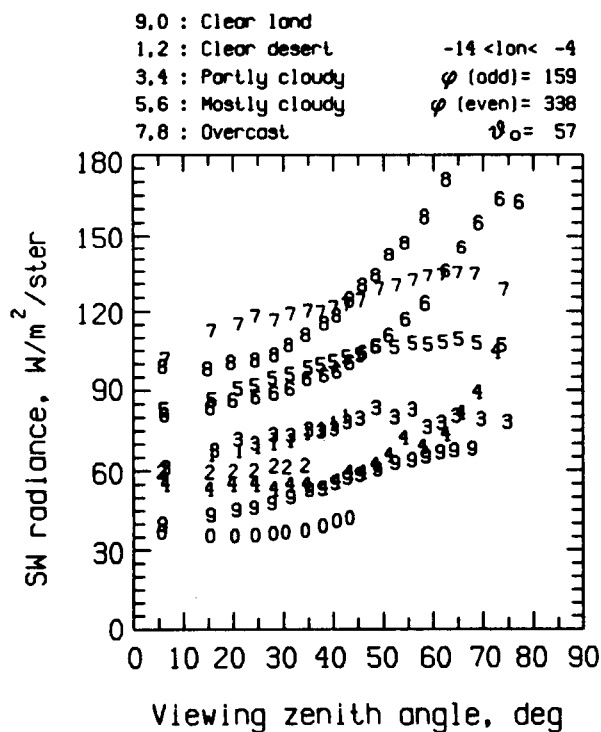


Figure 4.67 Sahel, Jan. 27.

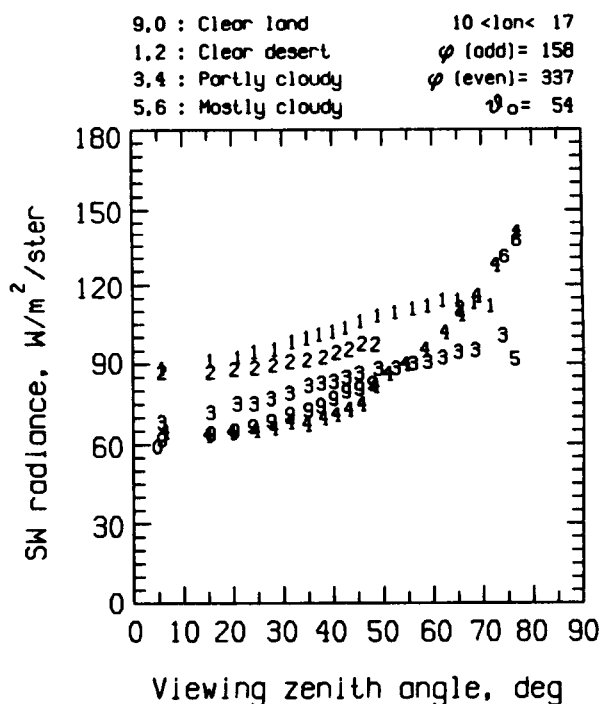


Figure 4.68 Sahel, Jan. 27.

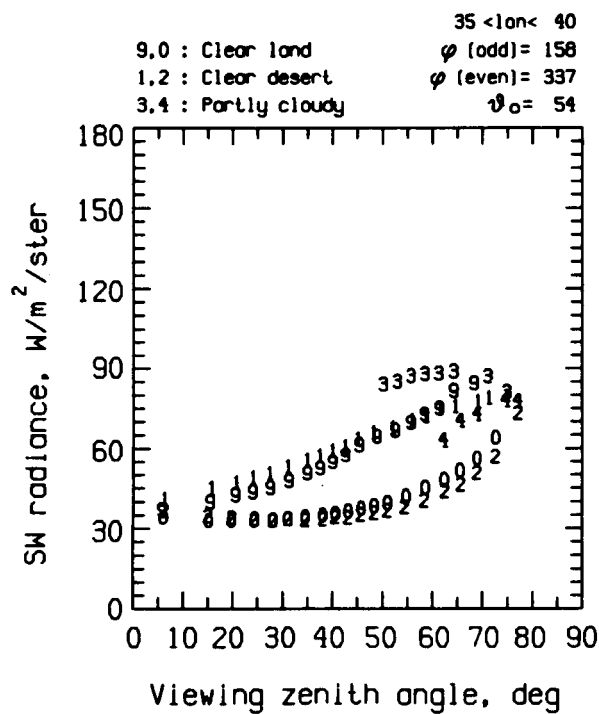


Figure 4.69 Sahel, Jan. 27.

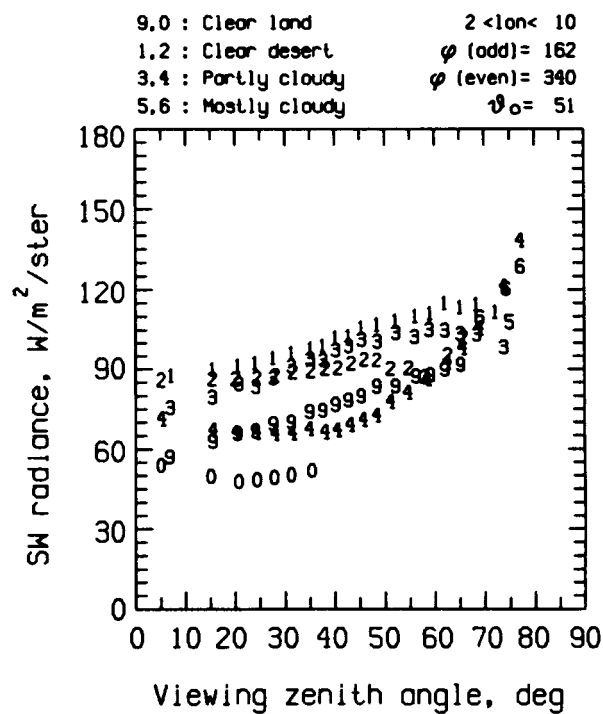


Figure 4.70 Sahel, Jan. 28.

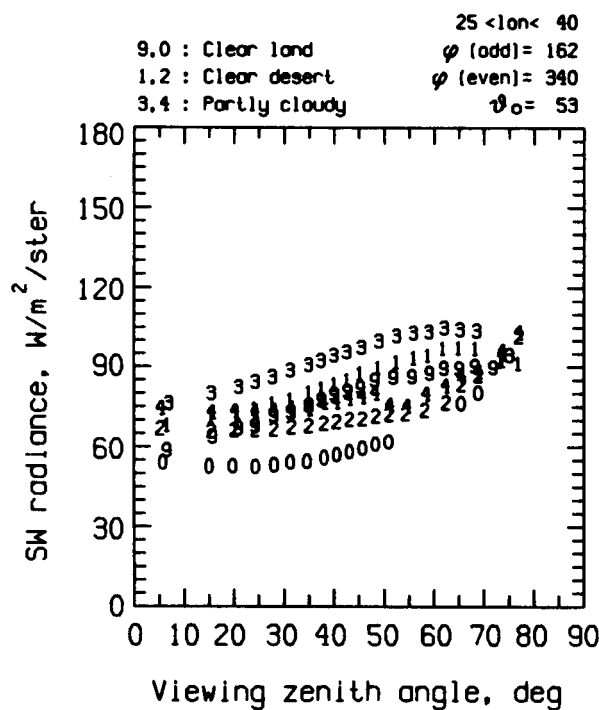


Figure 4.71 Sahel, Jan. 28.

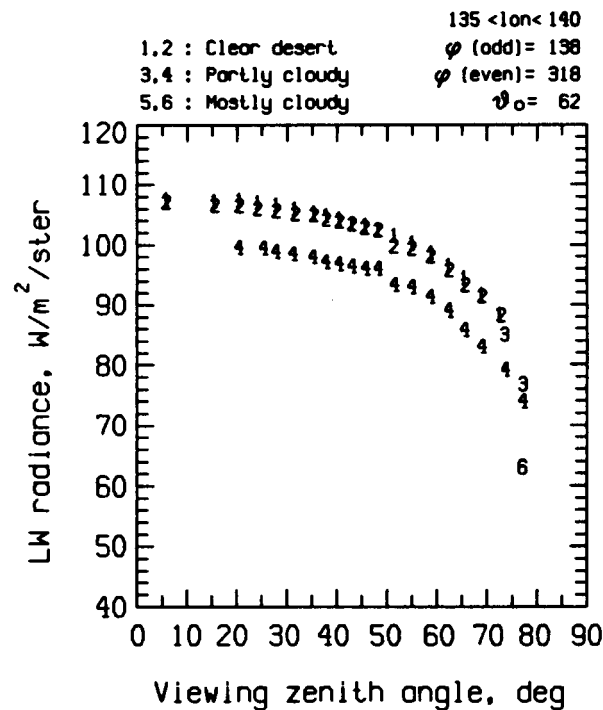


Figure 4.72 Australia, Jan. 17.

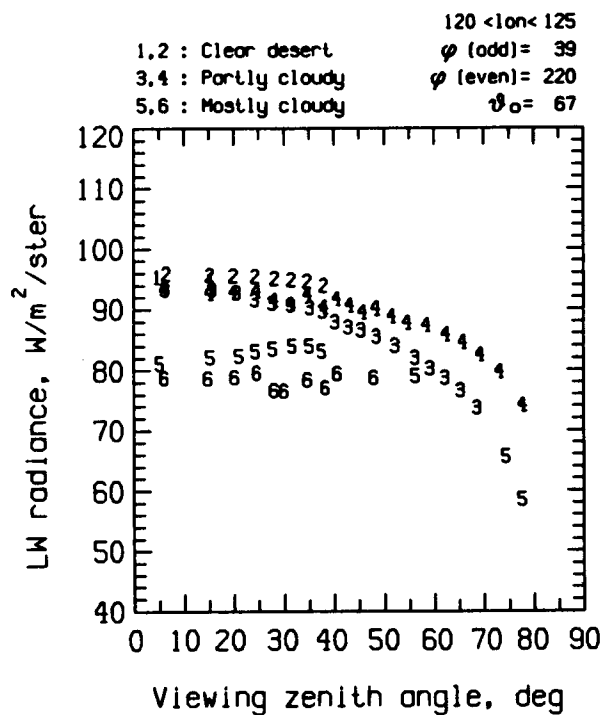


Figure 4.73 Australia, Jan. 17.

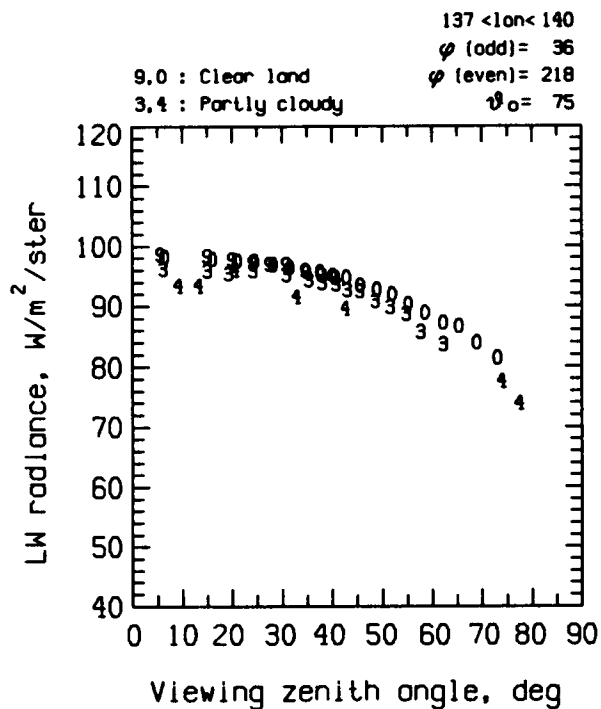


Figure 4.74 Australia, Jan. 17.

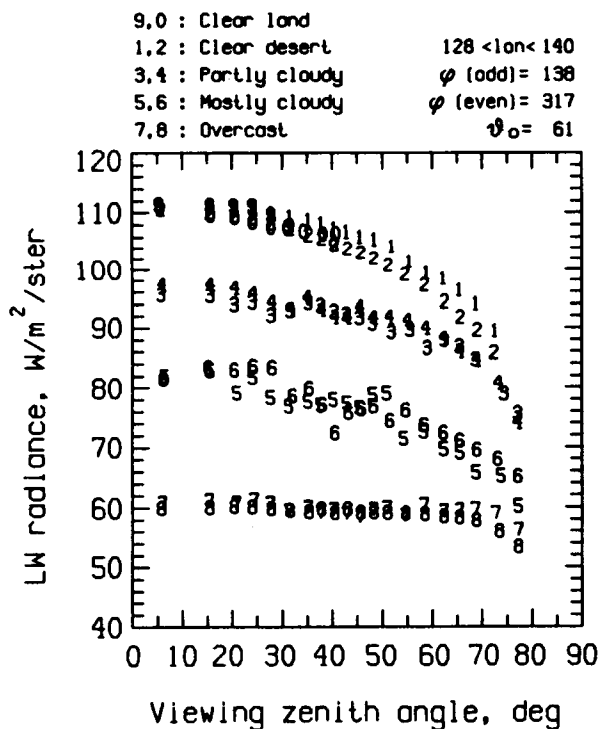


Figure 4.75 Australia, Jan. 18.

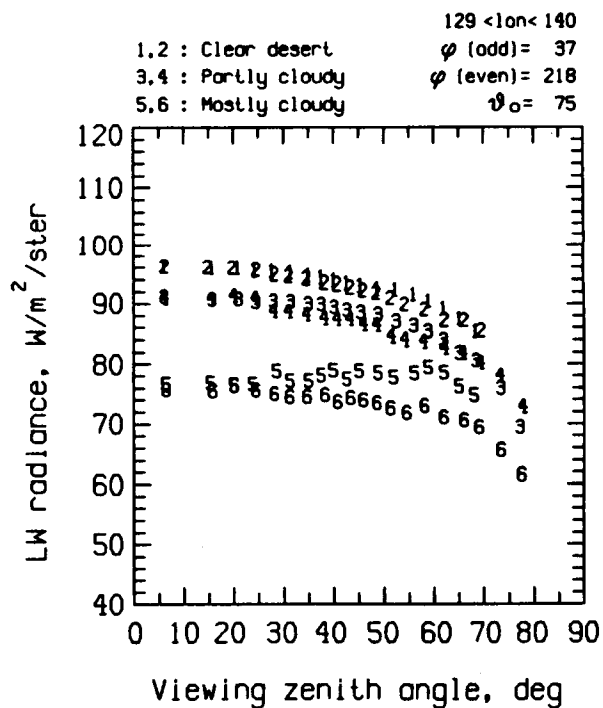


Figure 4.76 Australia, Jan. 18.

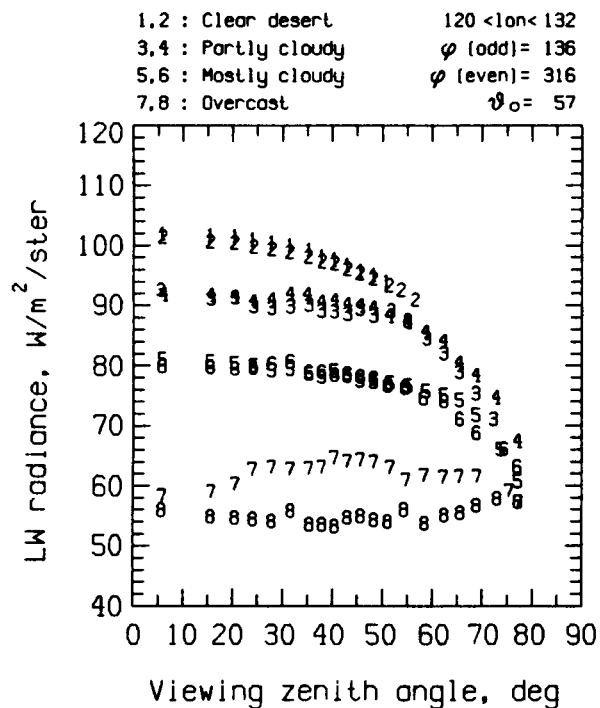


Figure 4.77 Australia, Jan. 19.

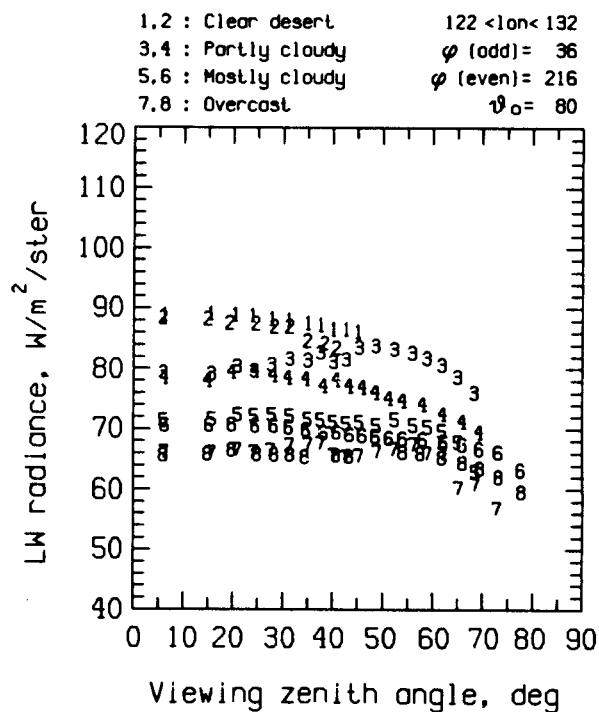


Figure 4.78 Australia, Jan. 19.

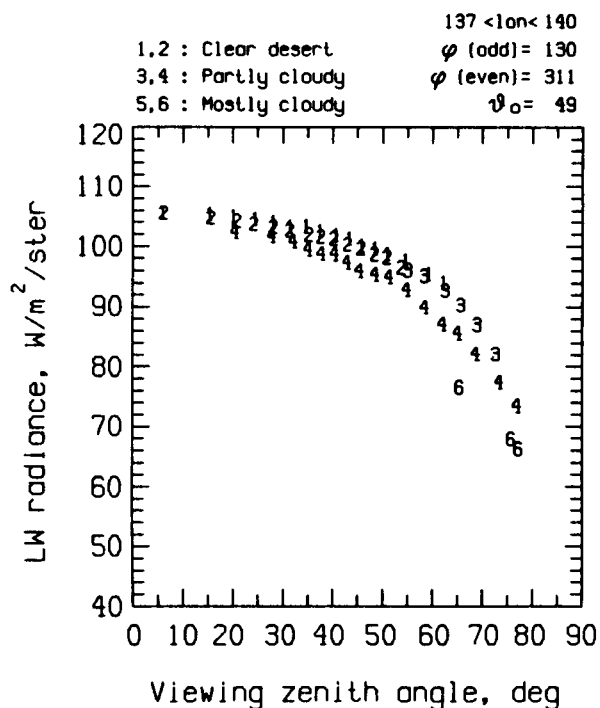


Figure 4.79 Australia, Jan. 20.

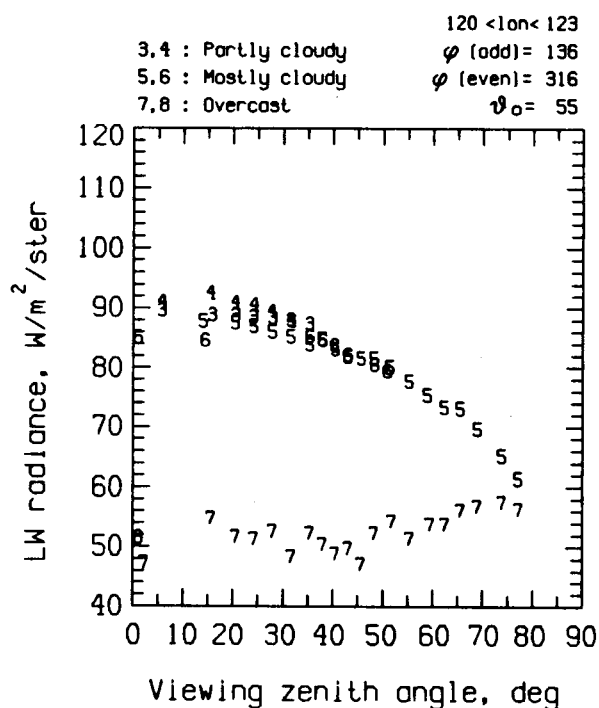


Figure 4.80 Australia, Jan. 20.

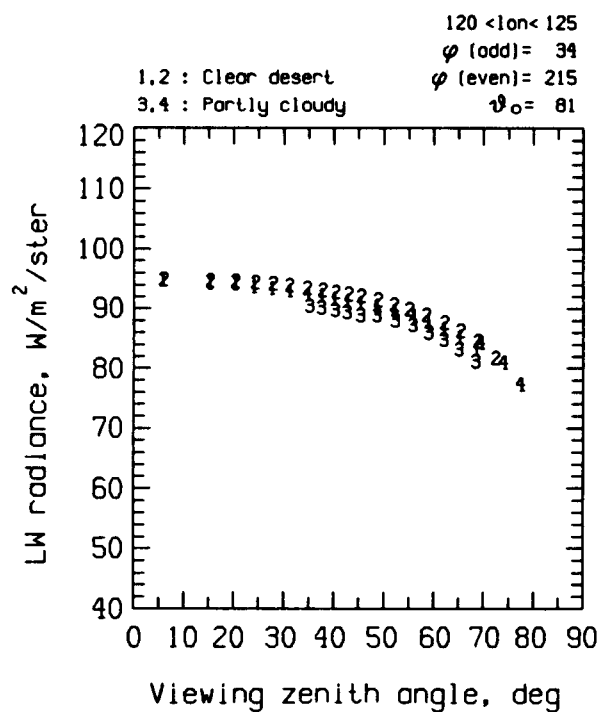


Figure 4.81 Australia, Jan. 20.

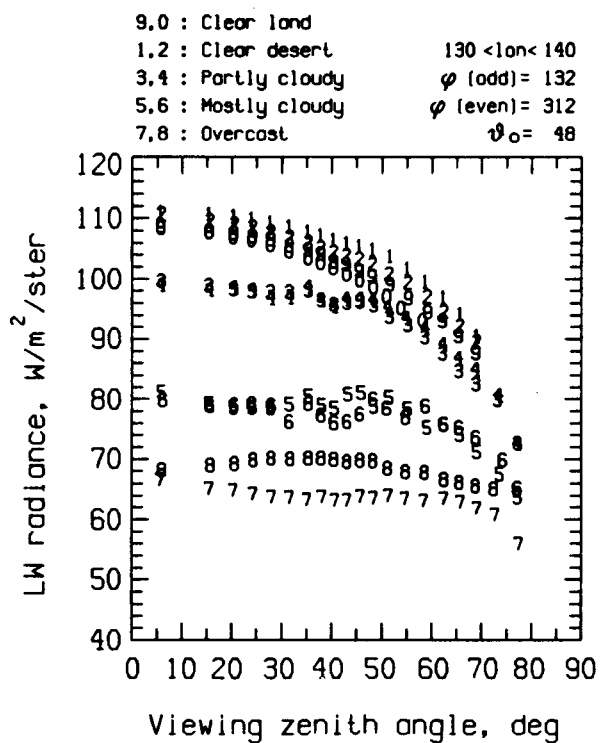


Figure 4.82 Australia, Jan. 21.

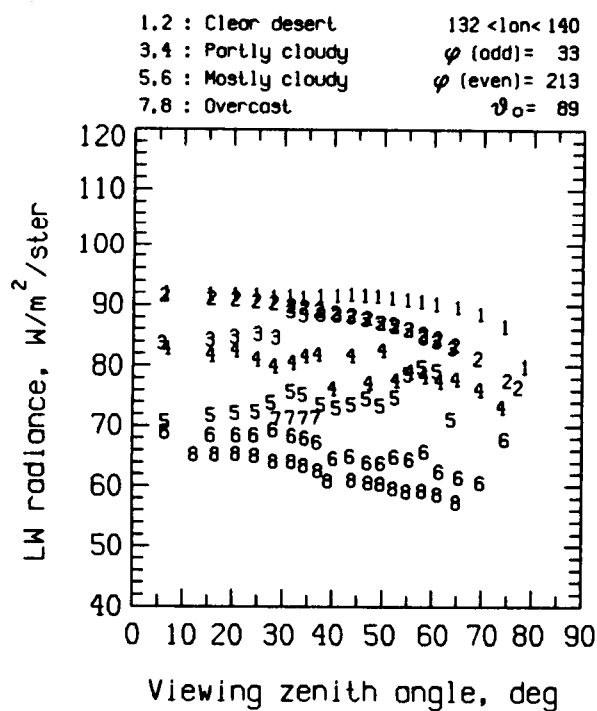


Figure 4.83 Australia, Jan. 21.

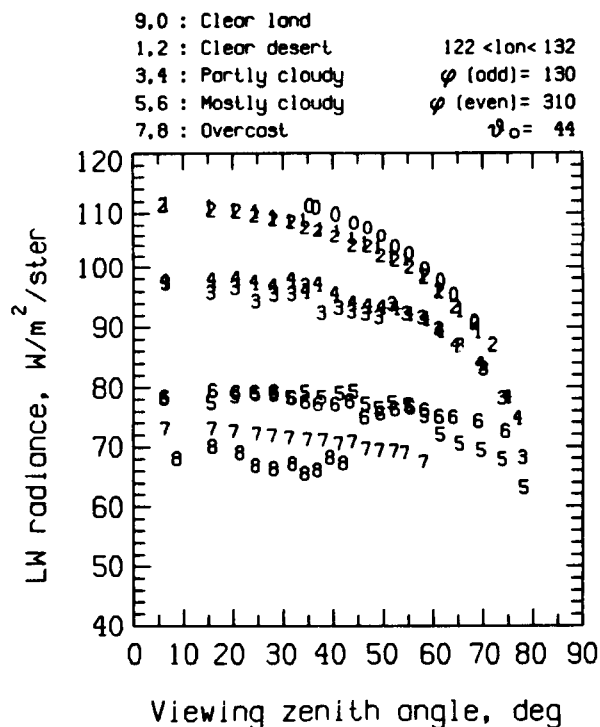


Figure 4.84 Australia, Jan. 22.

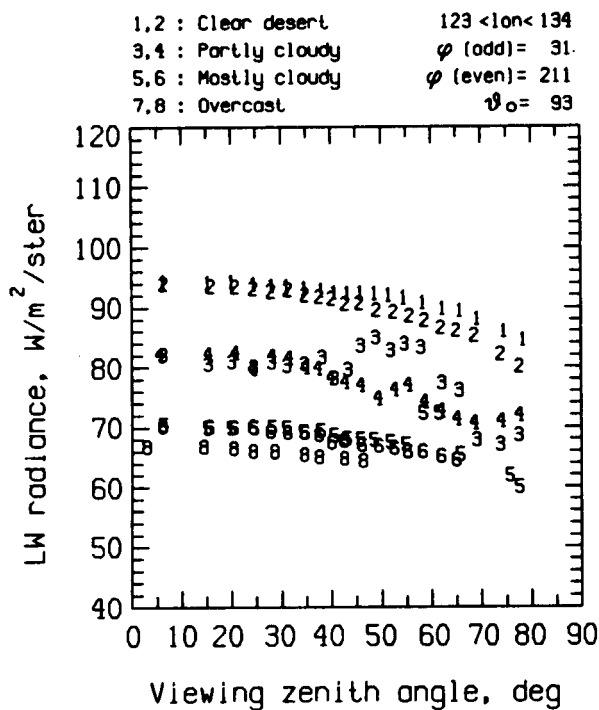


Figure 4.85 Australia, Jan. 22.

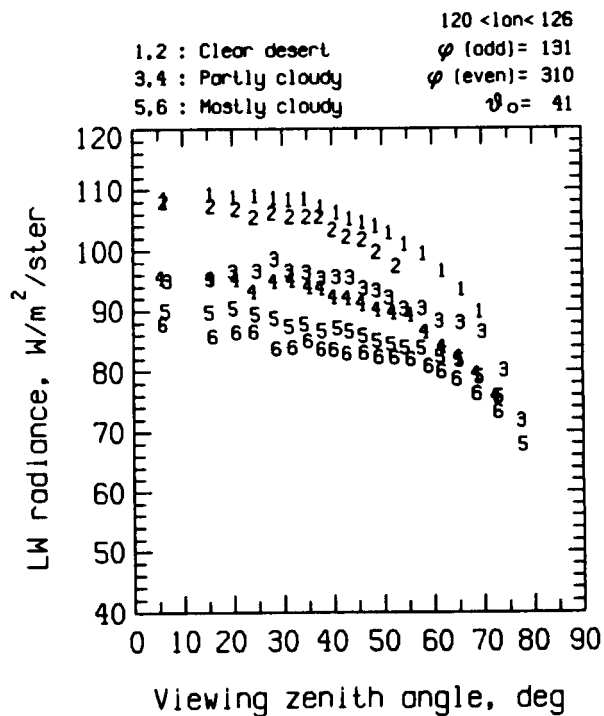


Figure 4.86 Australia, Jan. 23.

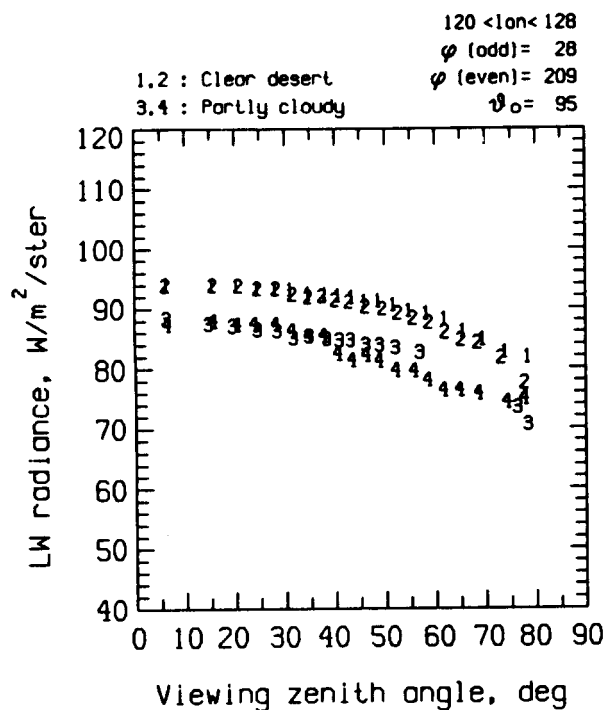


Figure 4.87 Australia, Jan. 23.

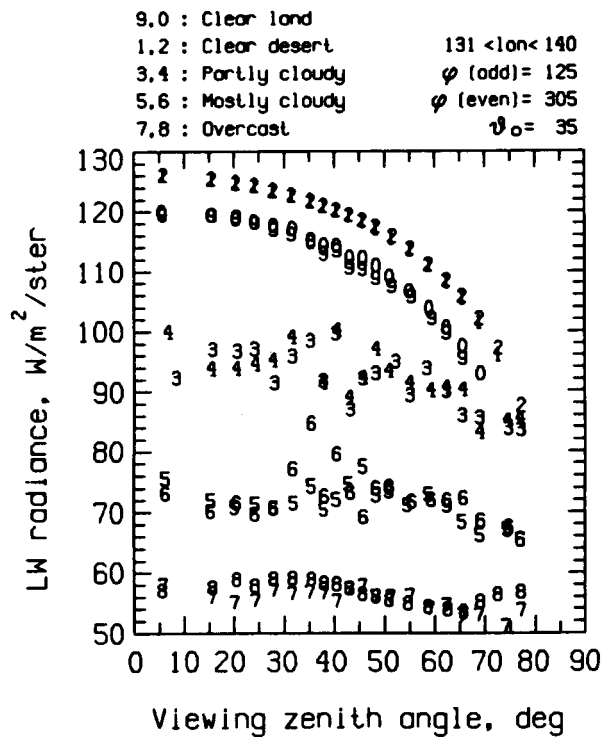


Figure 4.88 Australia, Jan. 24.

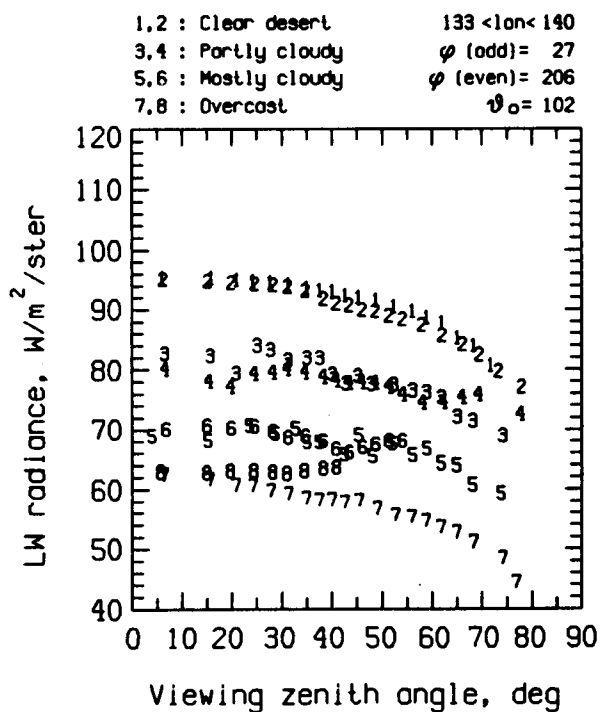


Figure 4.89 Australia, Jan. 24.

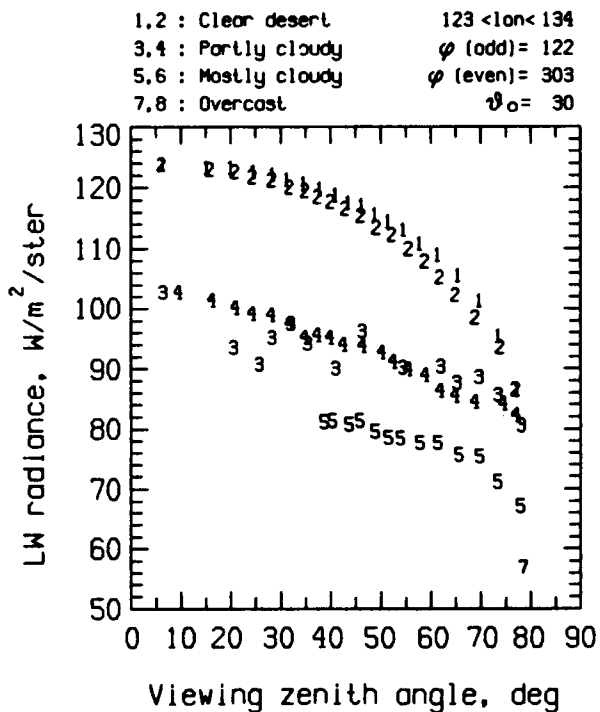


Figure 4.90 Australia, Jan. 25.

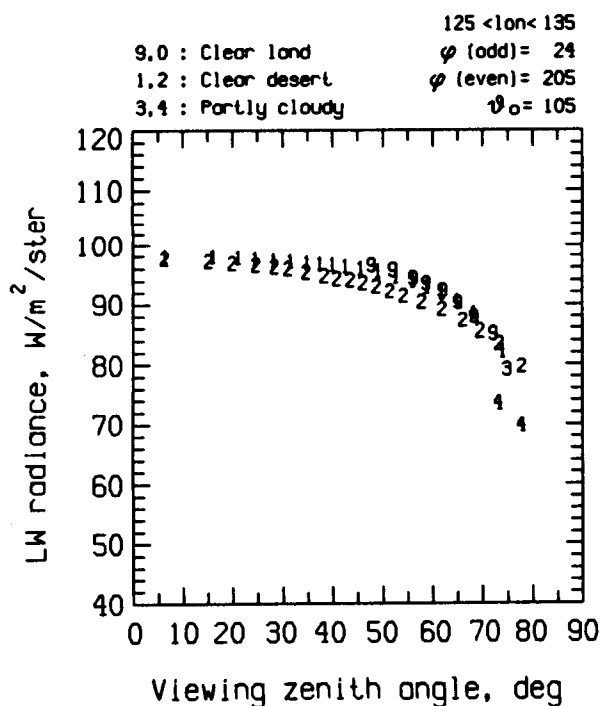


Figure 4.91 Australia, Jan. 25.

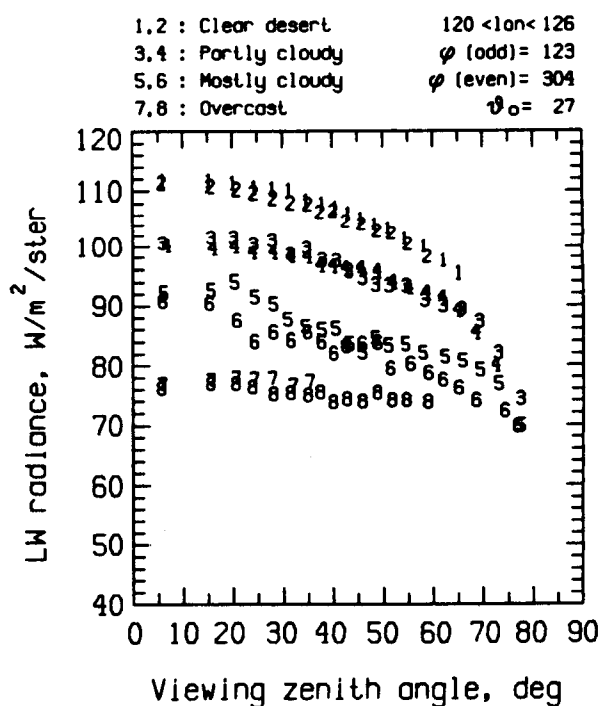


Figure 4.92 Australia, Jan. 26.

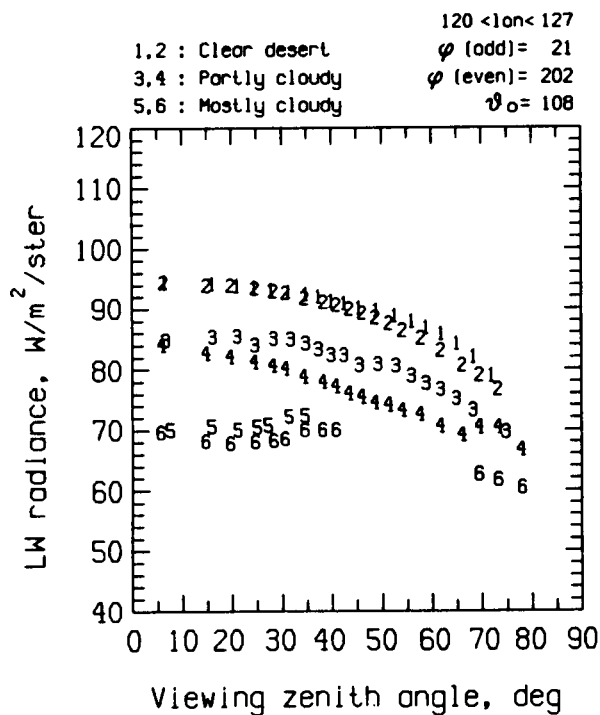


Figure 4.93 Australia, Jan. 26.

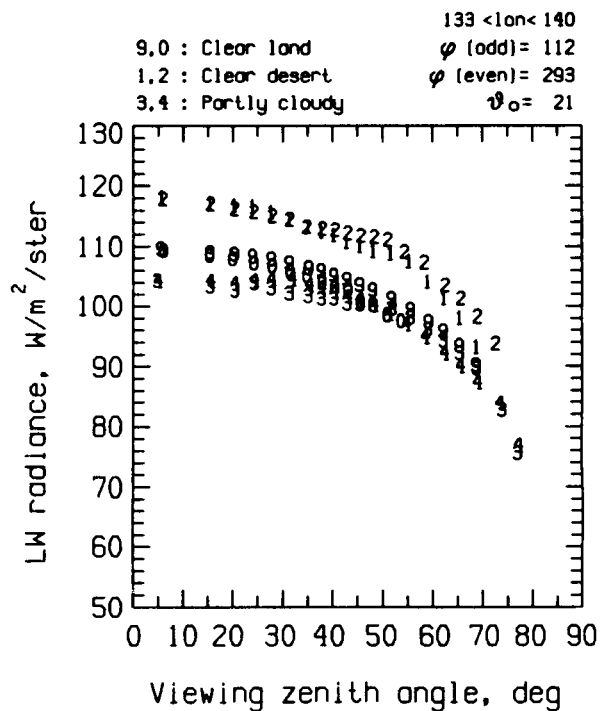


Figure 4.94 Australia, Jan. 27.

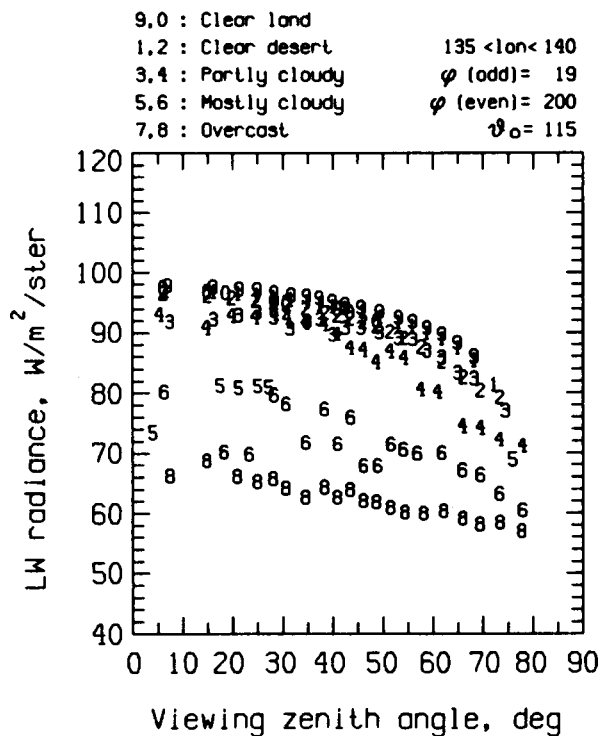


Figure 4.95 Australia, Jan. 27.

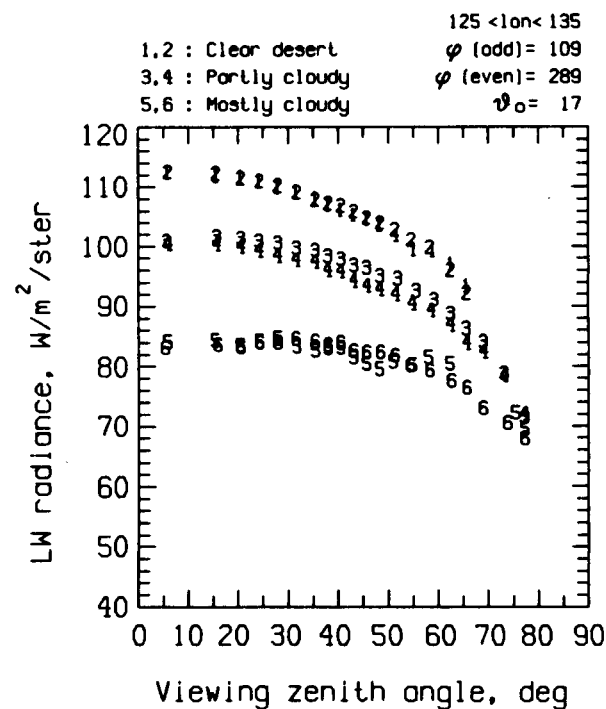


Figure 4.96 Australia, Jan. 28.

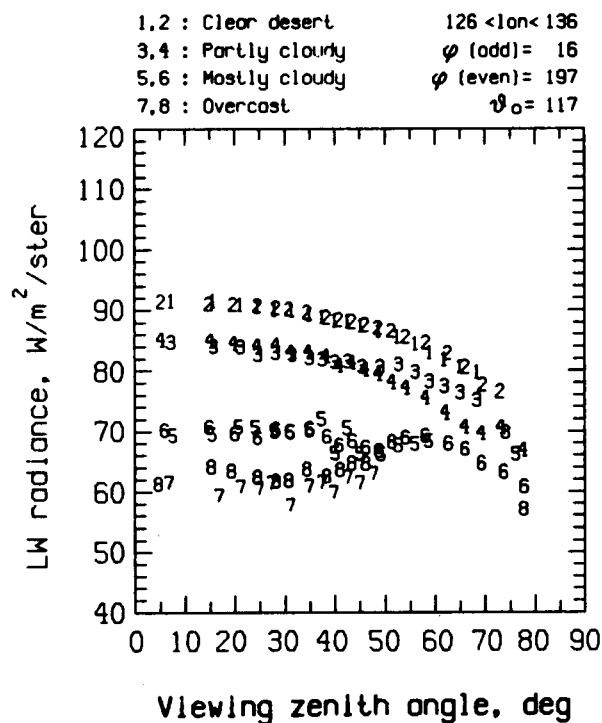


Figure 4.97 Australia, Jan. 28.

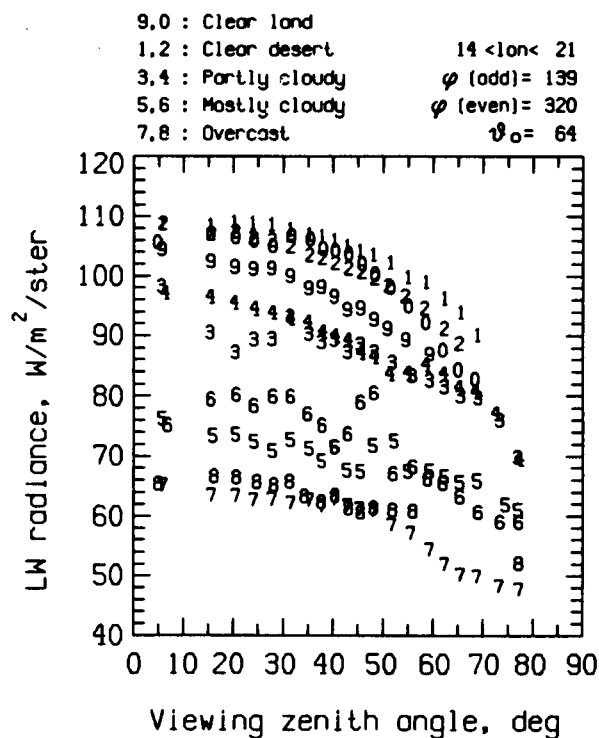


Figure 4.98 Kalahari, Jan. 17.

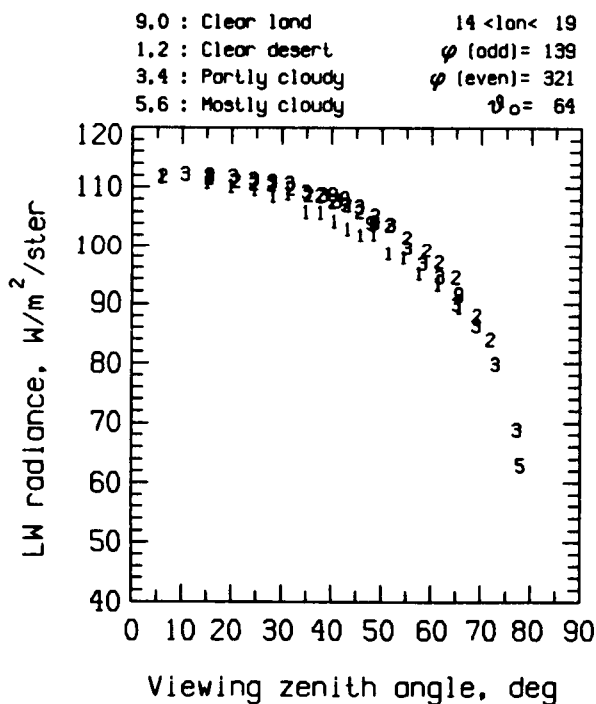


Figure 4.99 Kalahari, Jan. 18.

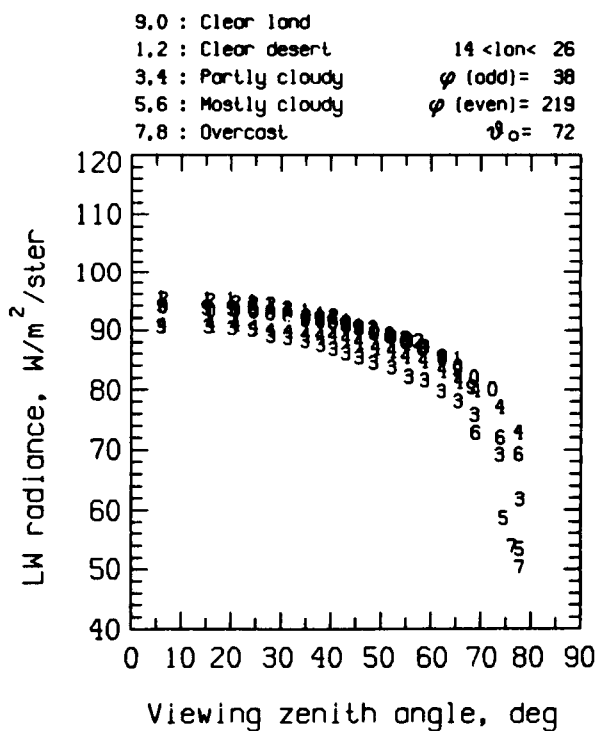


Figure 4.100 Kalahari, Jan. 18.

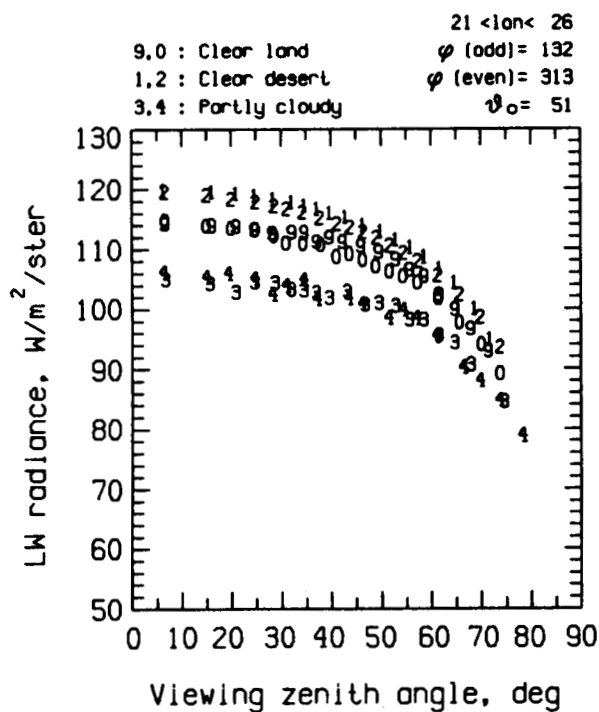


Figure 4.101 Kalahari, Jan. 19.

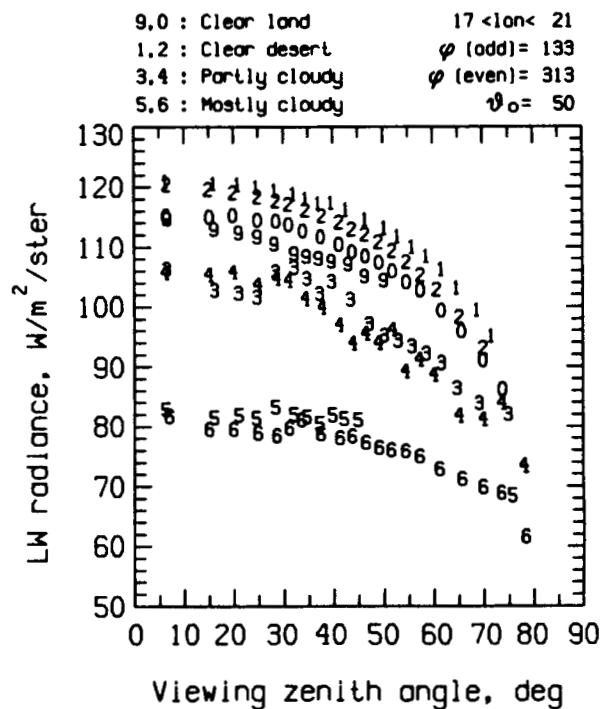


Figure 4.102 Kalahari, Jan. 20.

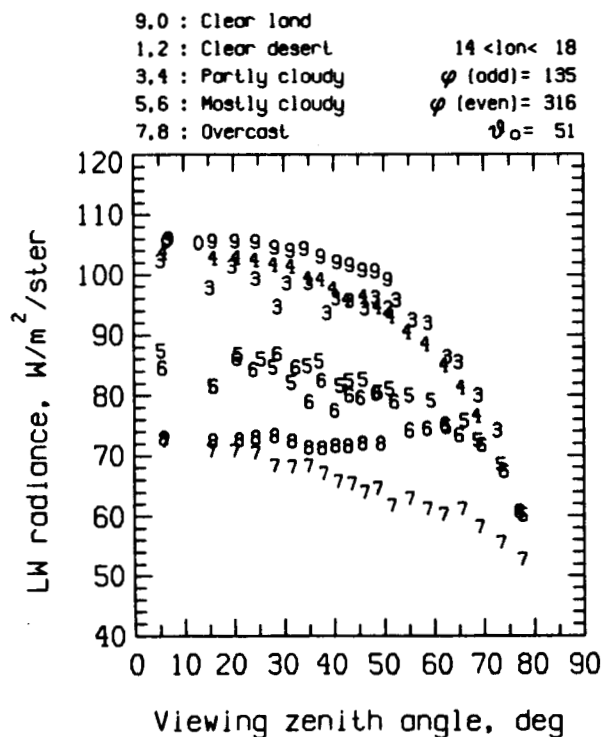


Figure 4.103 Kalahari, Jan. 21.

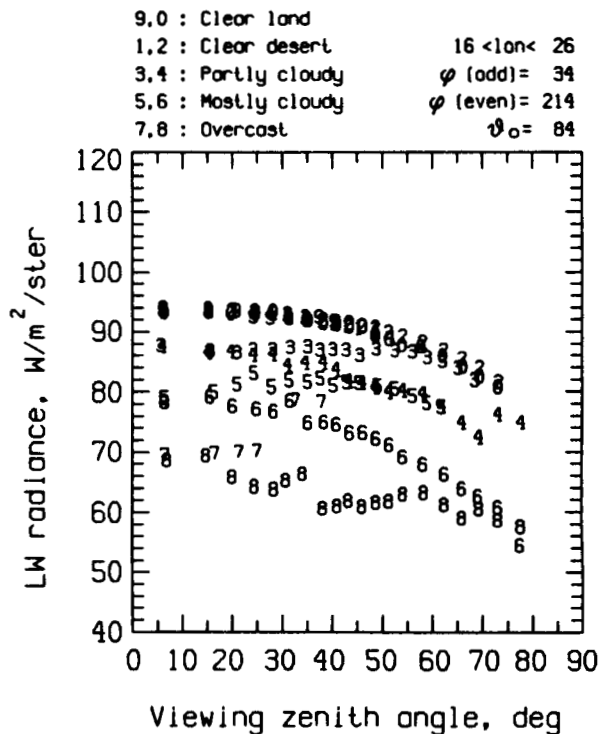


Figure 4.104 Kalahari, Jan. 21.

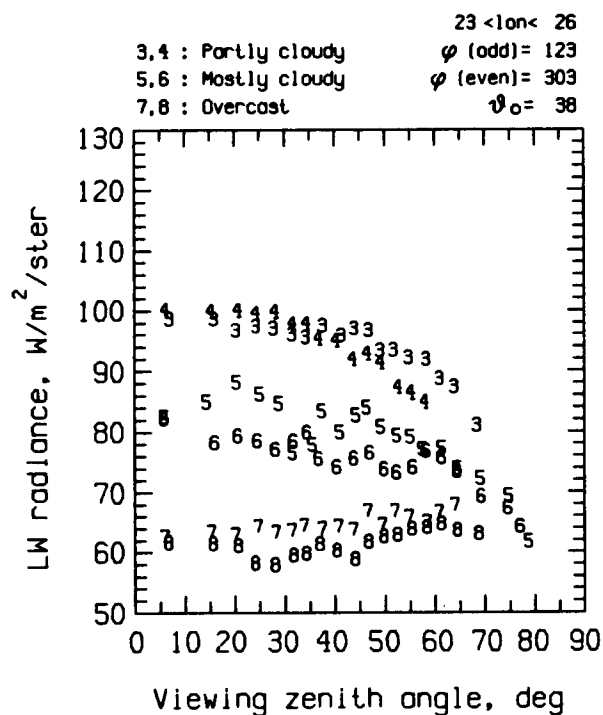


Figure 4.105 Kalahari, Jan. 22.

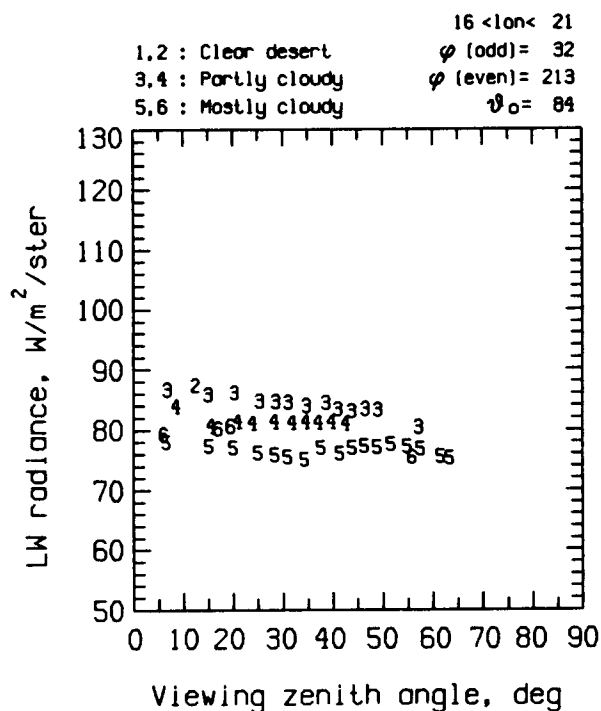


Figure 4.106 Kalahari, Jan. 22.

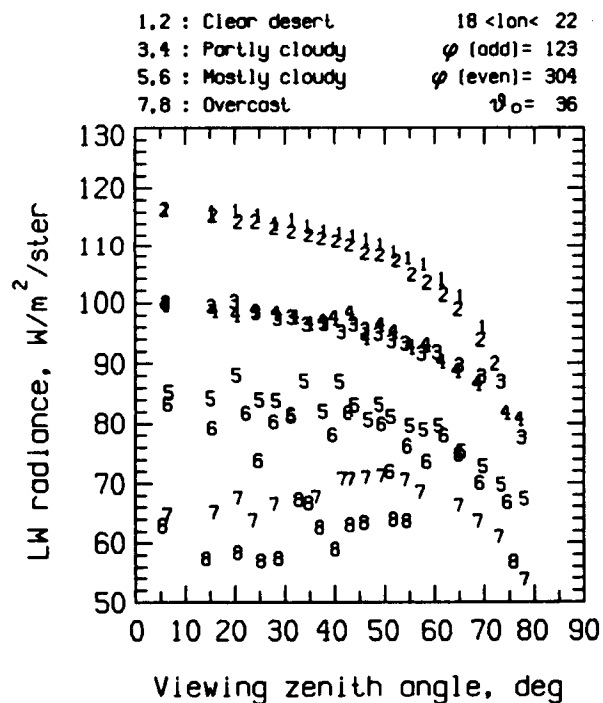


Figure 4.107 Kalahari, Jan. 23.

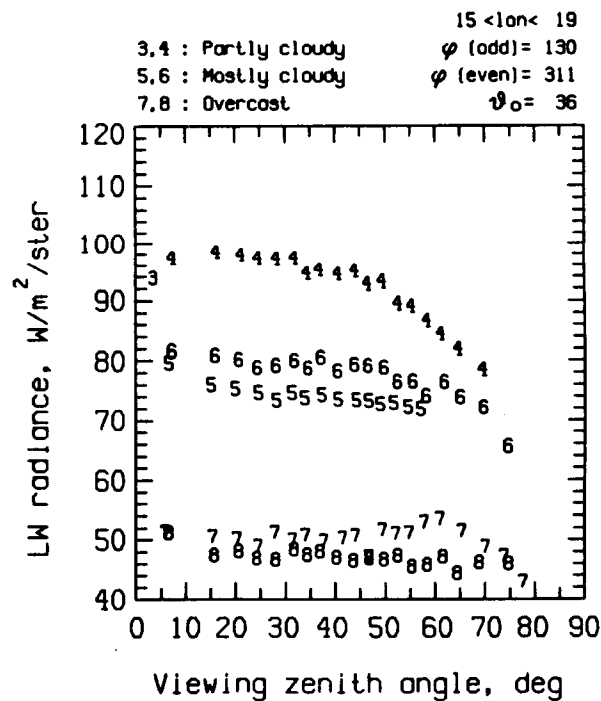


Figure 4.108 Kalahari, Jan. 24.

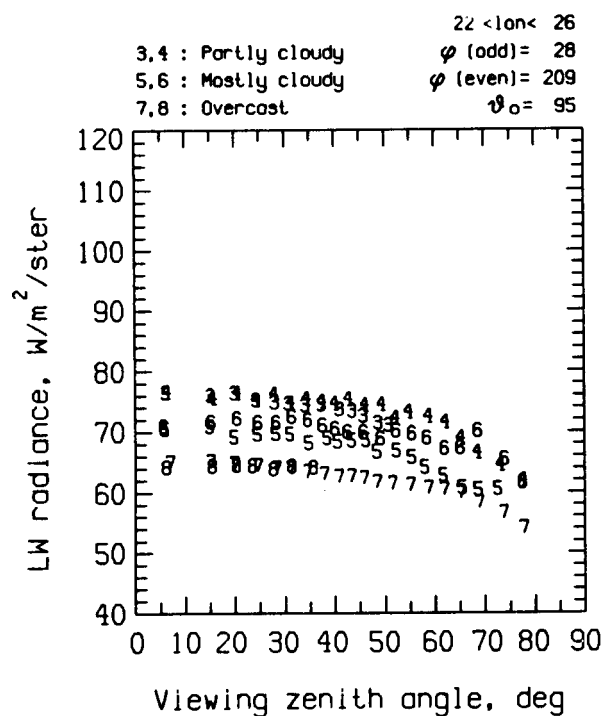


Figure 4.109 Kalahari, Jan. 24.

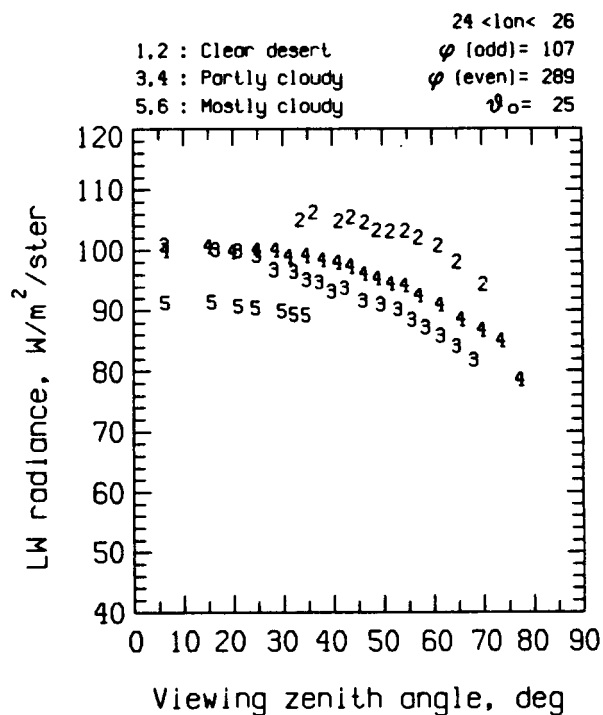


Figure 4.110 Kalahari, Jan. 25.

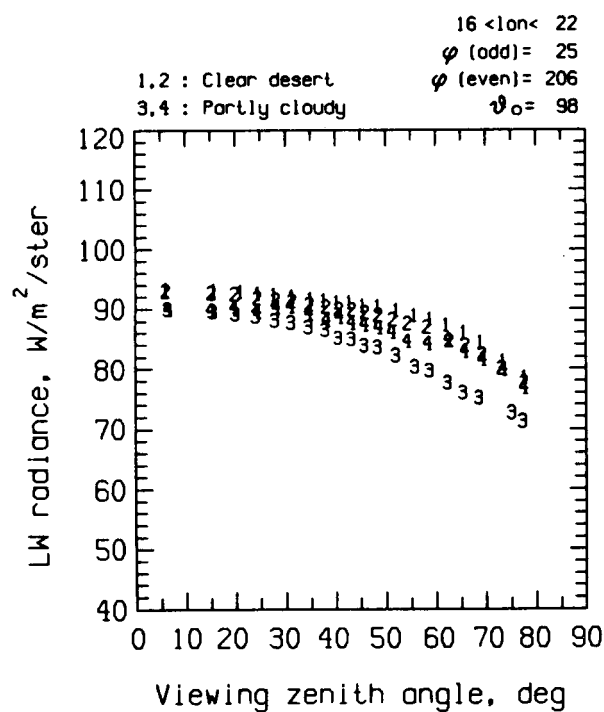


Figure 4.111 Kalahari, Jan. 25.

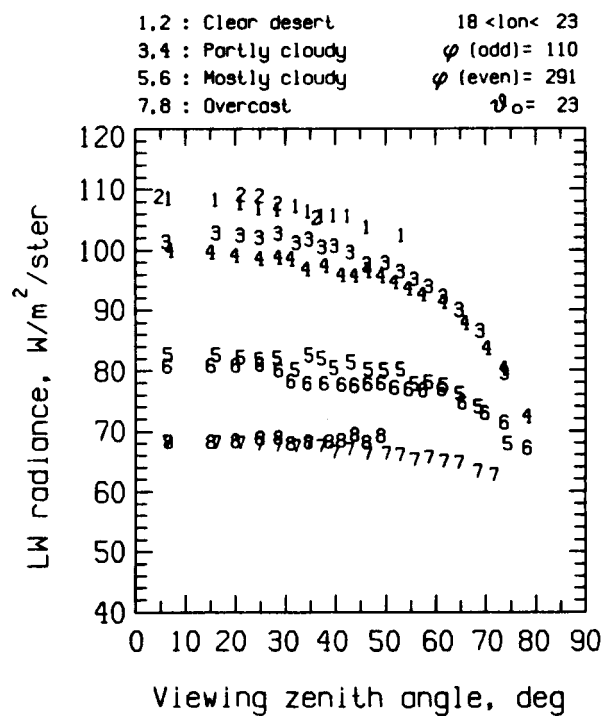


Figure 4.112 Kalahari, Jan. 26.

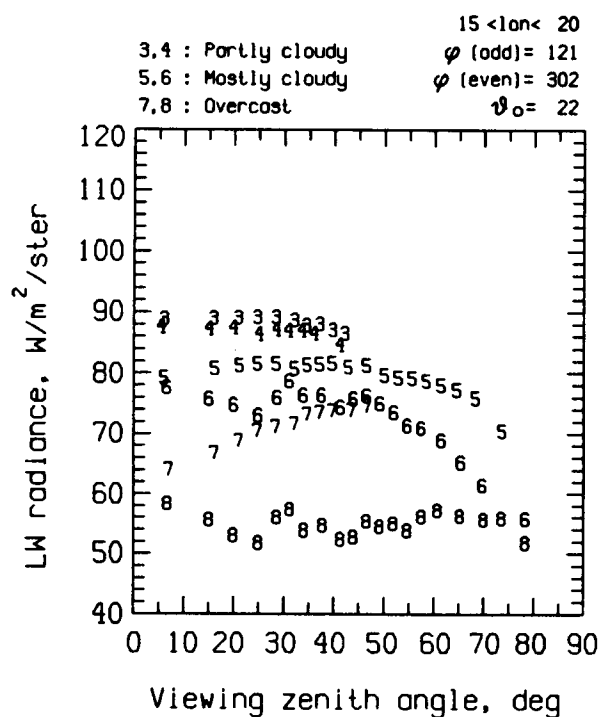


Figure 4.113 Kalahari, Jan. 27.

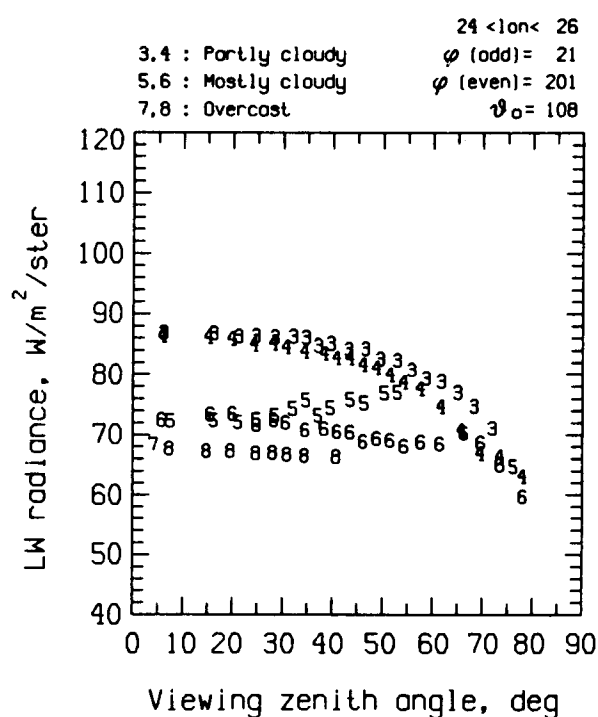


Figure 4.114 Kalahari, Jan. 27.

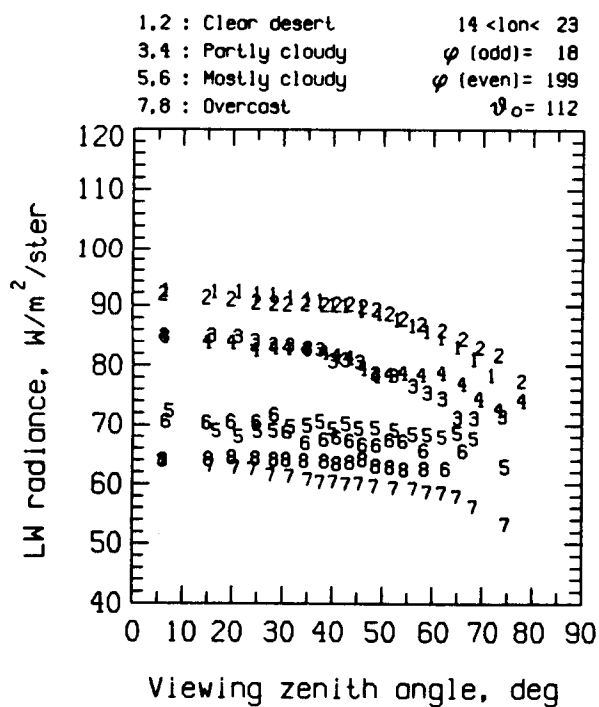


Figure 4.115 Kalahari, Jan. 28.

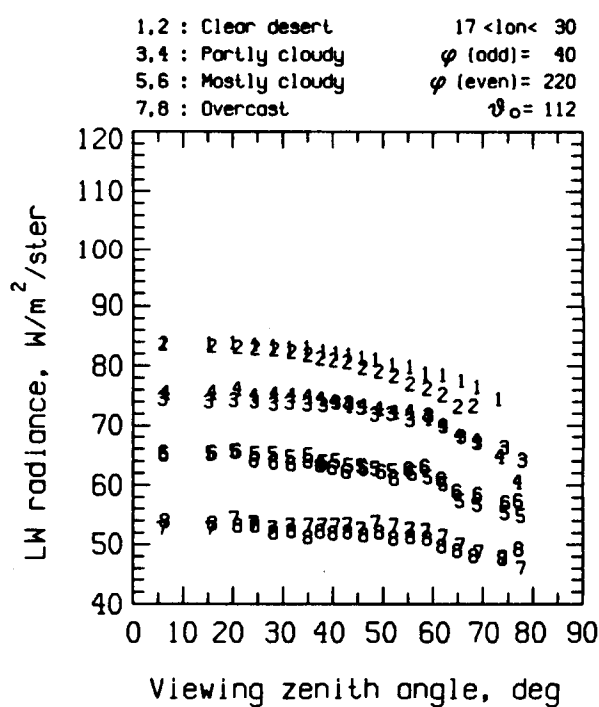


Figure 4.116 Sahara, Jan. 17.

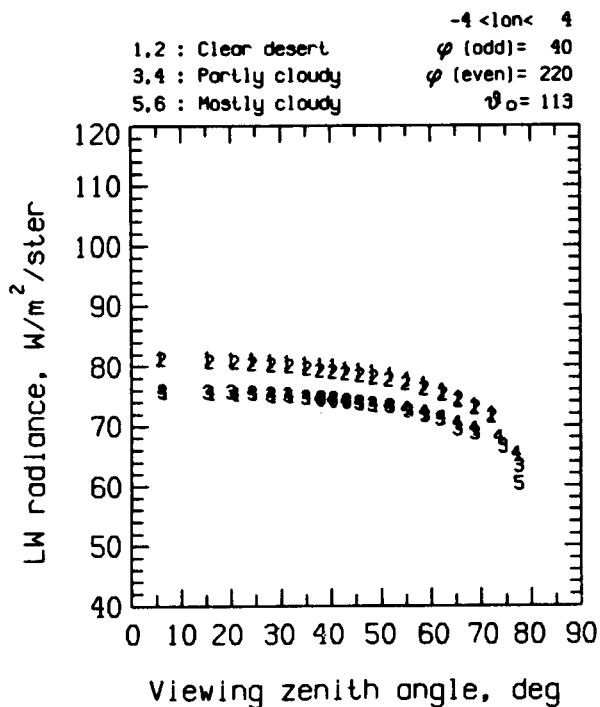


Figure 4.117 Sahara, Jan. 17.

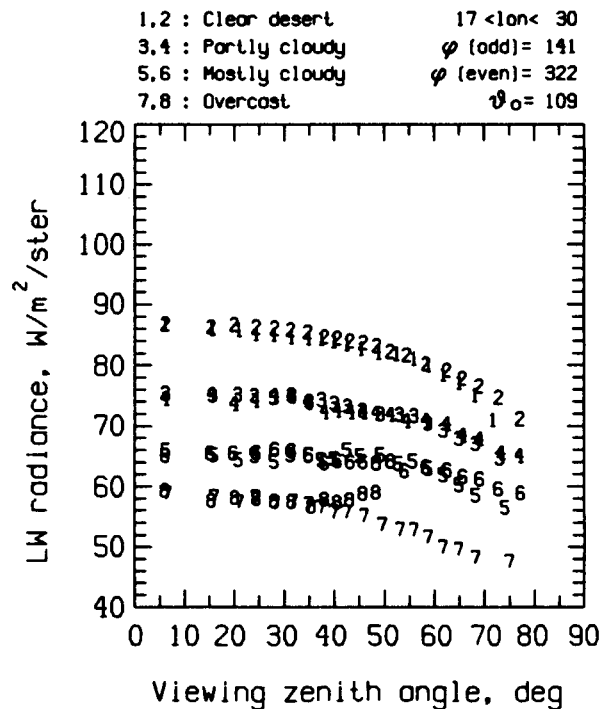


Figure 4.118 Sahara, Jan. 17.

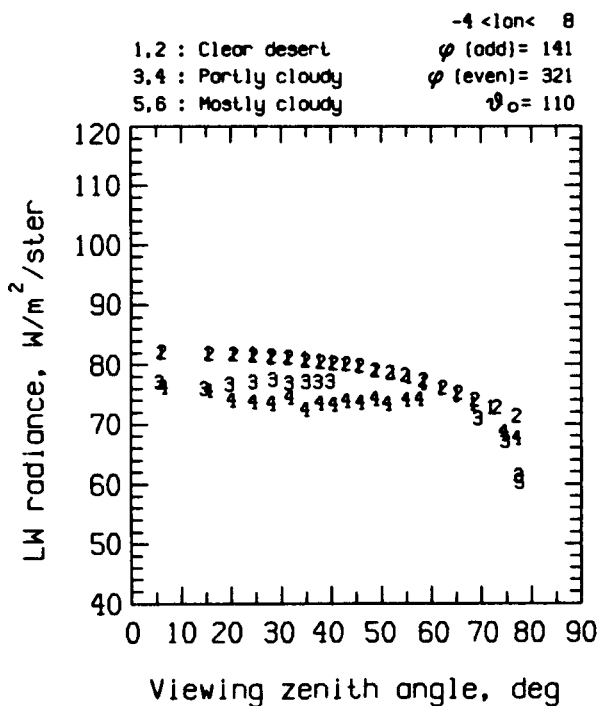


Figure 4.119 Sahara, Jan. 17.

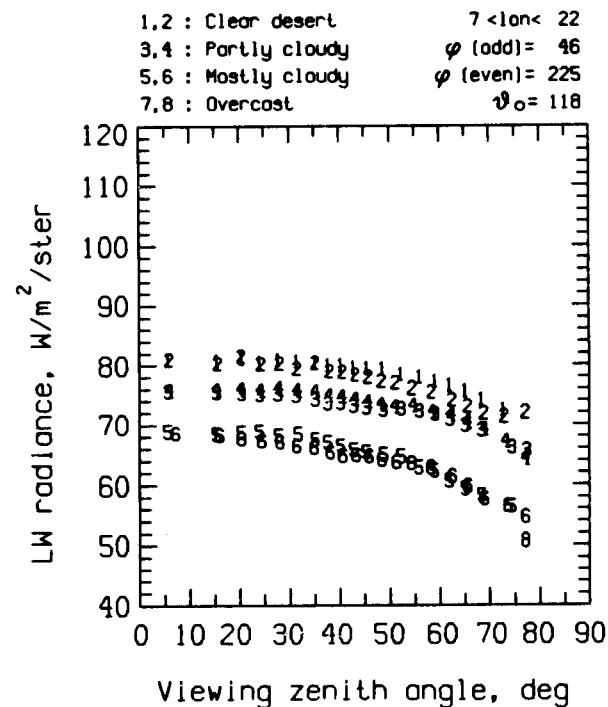


Figure 4.120 Sahara, Jan. 18.

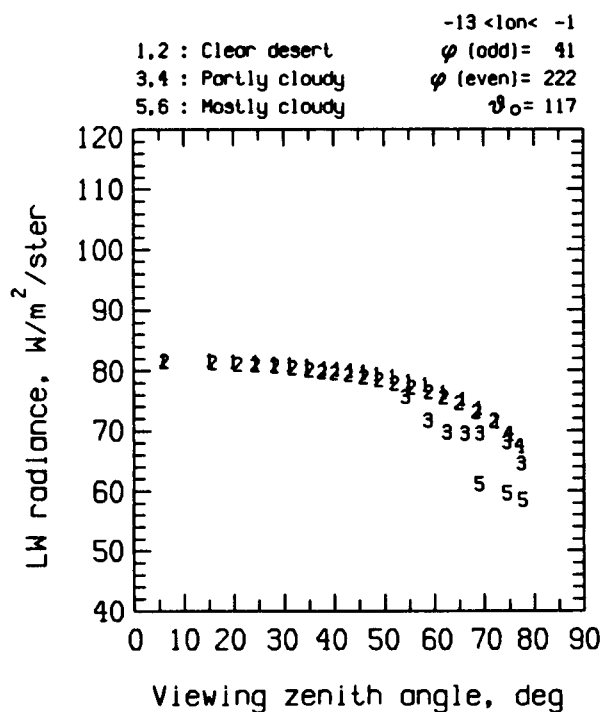


Figure 4.121 Sahara, Jan. 18.

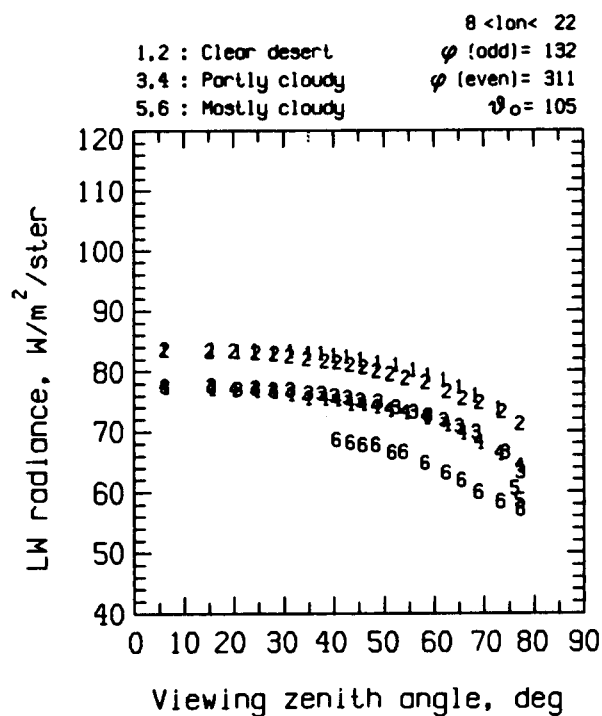


Figure 4.122 Sahara, Jan. 18.

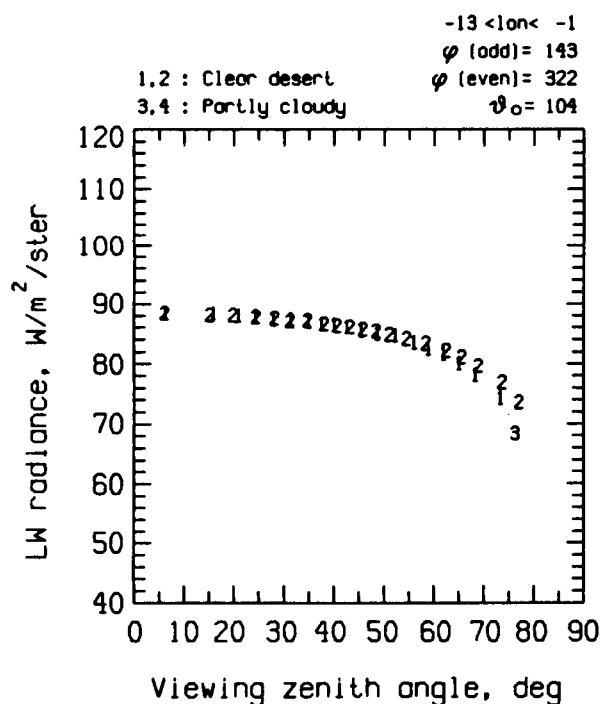


Figure 4.123 Sahara, Jan. 18.

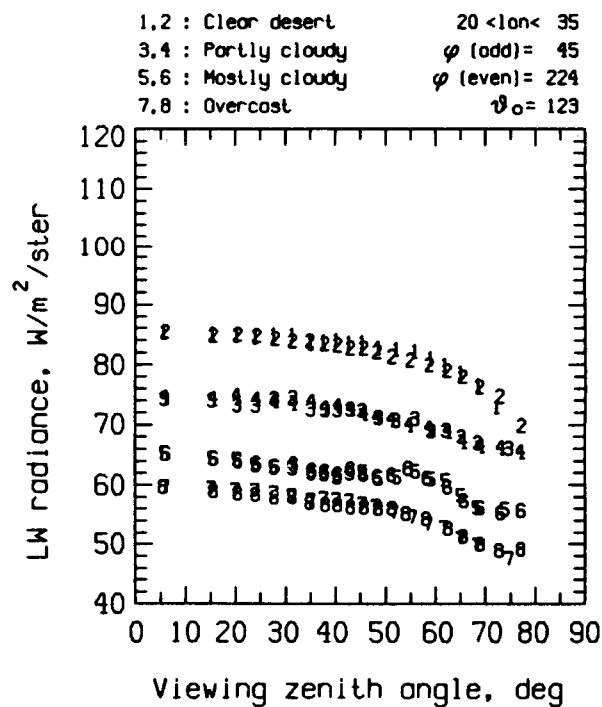


Figure 4.124 Sahara, Jan. 19.

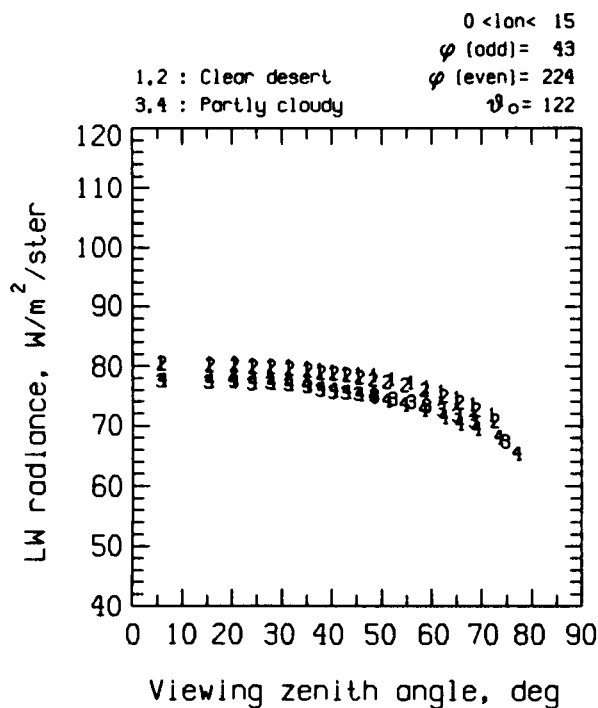


Figure 4.125 Sahara, Jan. 19.

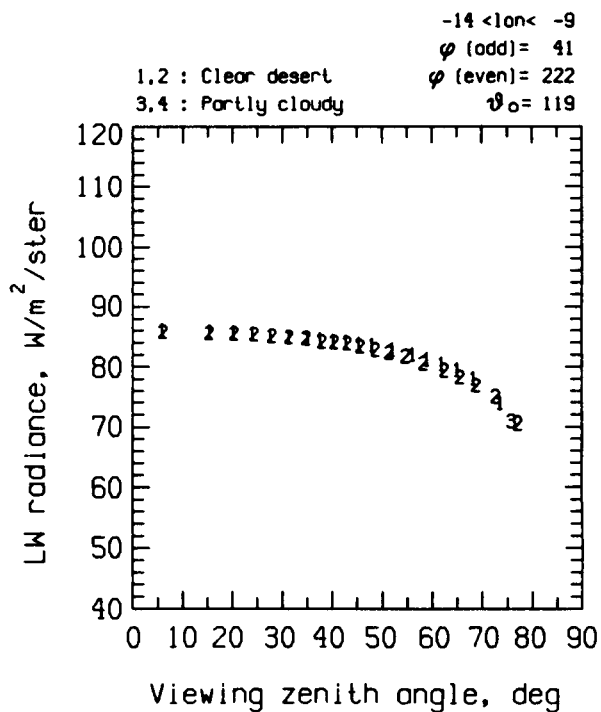


Figure 4.126 Sahara, Jan. 19.

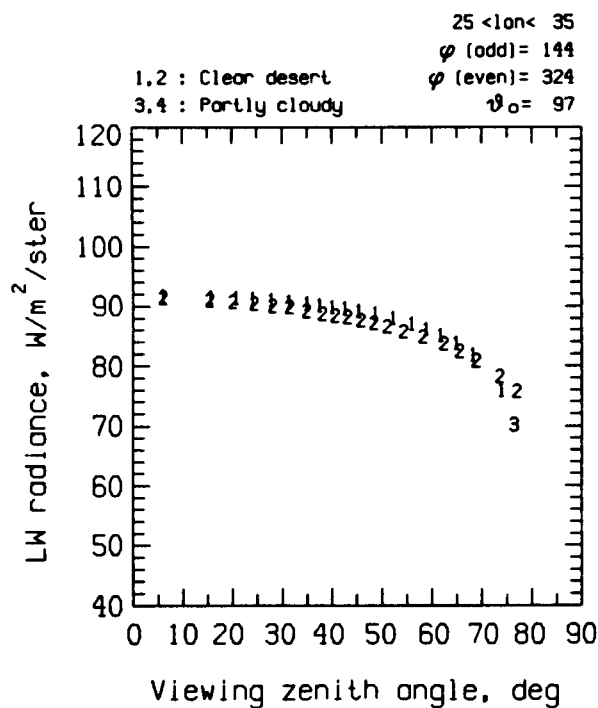


Figure 4.127 Sahara, Jan. 19.

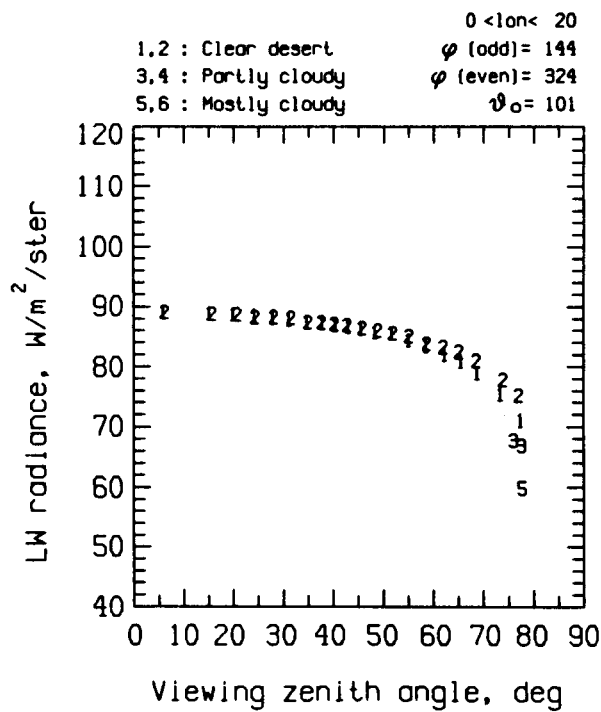


Figure 4.128 Sahara, Jan. 19.

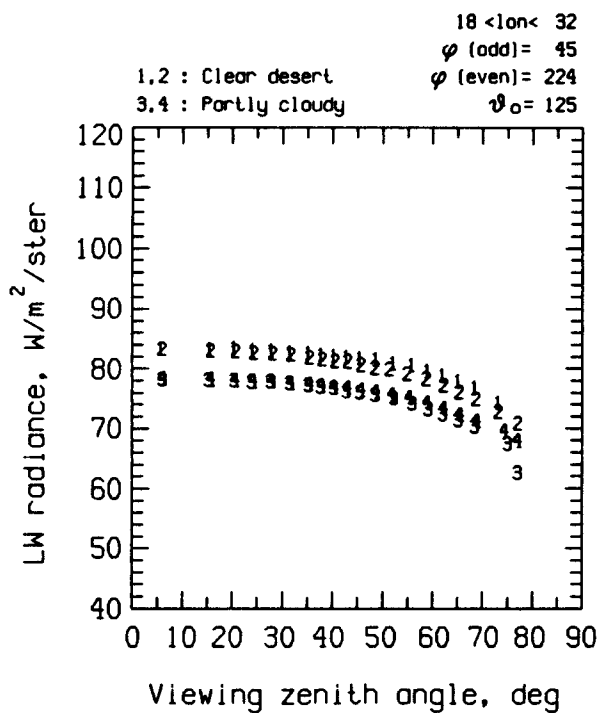


Figure 4.129 Sahara, Jan. 20.

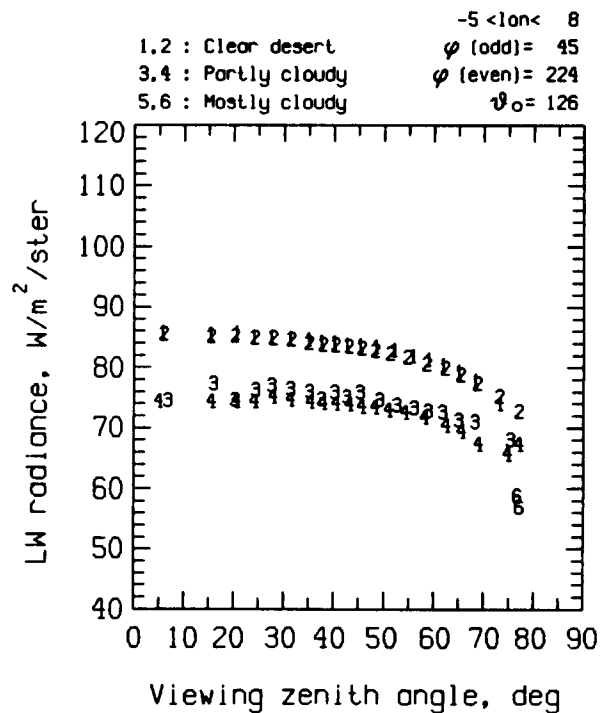


Figure 4.130 Sahara, Jan. 20.

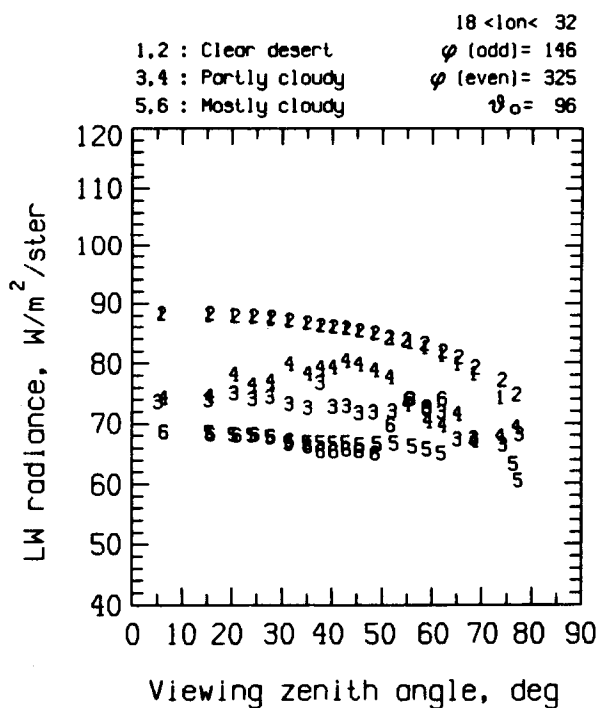


Figure 4.131 Sahara, Jan. 20.

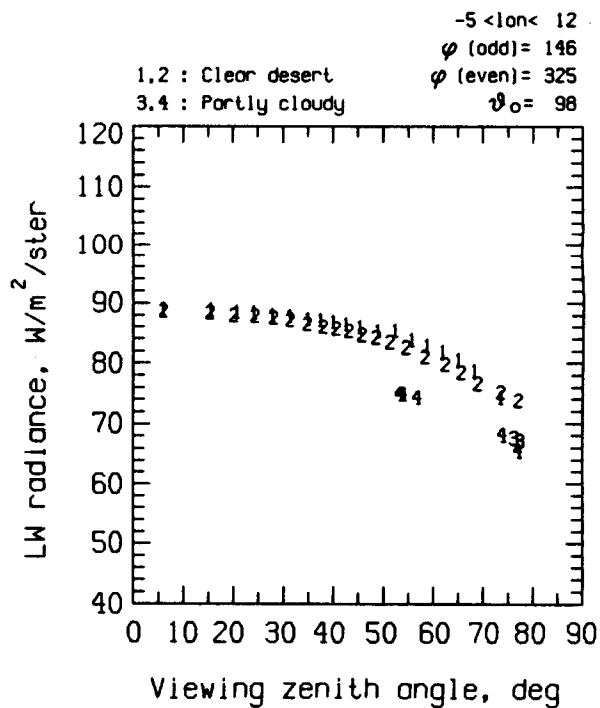


Figure 4.132 Sahara, Jan. 20.

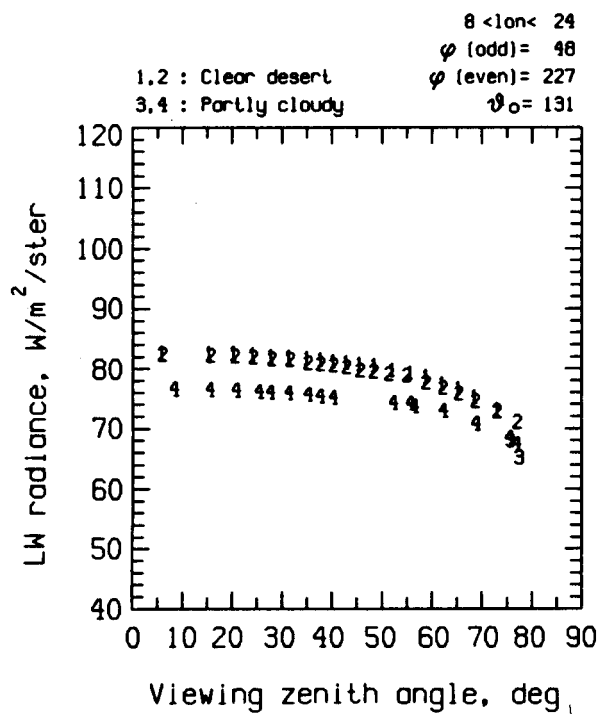


Figure 4.133 Sahara, Jan. 21.

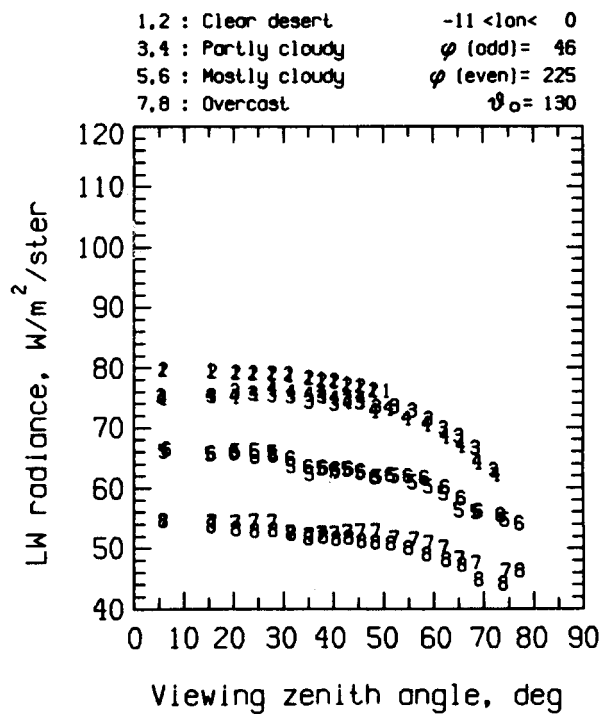


Figure 4.134 Sahara, Jan. 21.

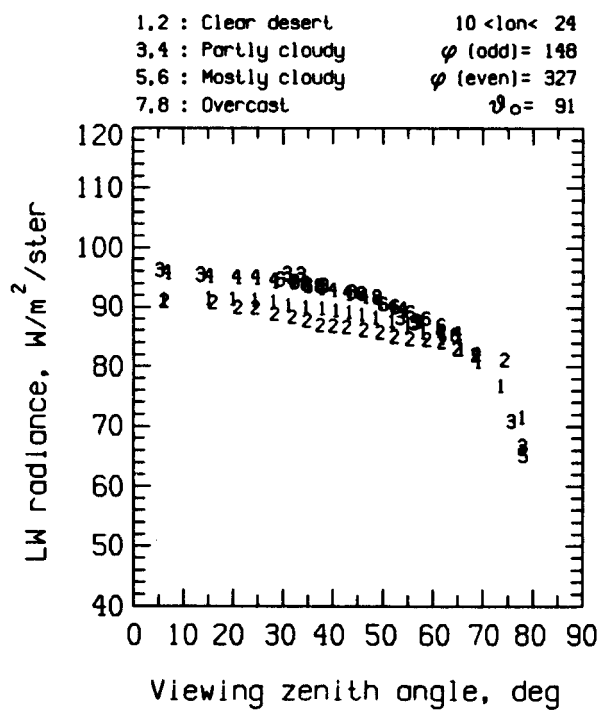


Figure 4.135 Sahara, Jan. 21.

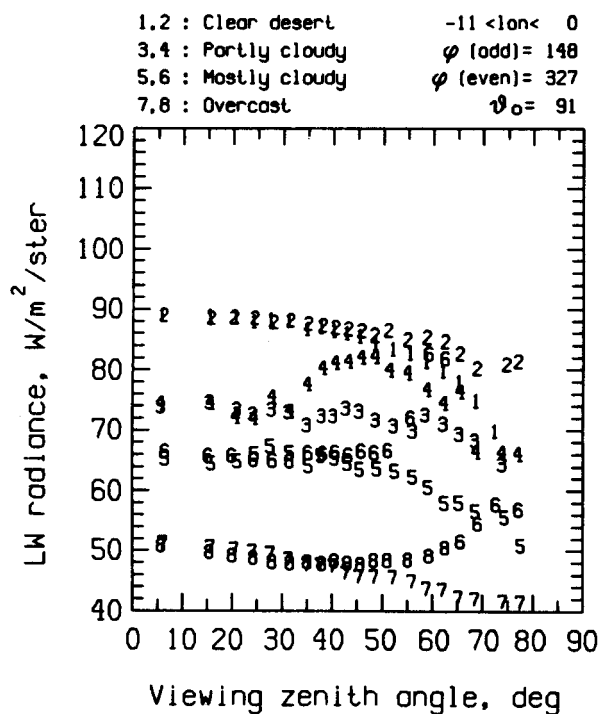


Figure 4.136 Sahara, Jan. 21.

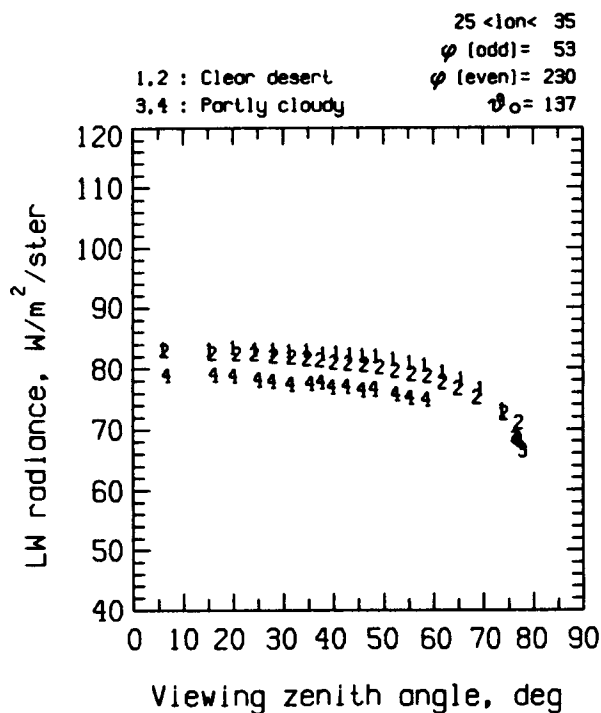


Figure 4.137 Sahara, Jan. 22.

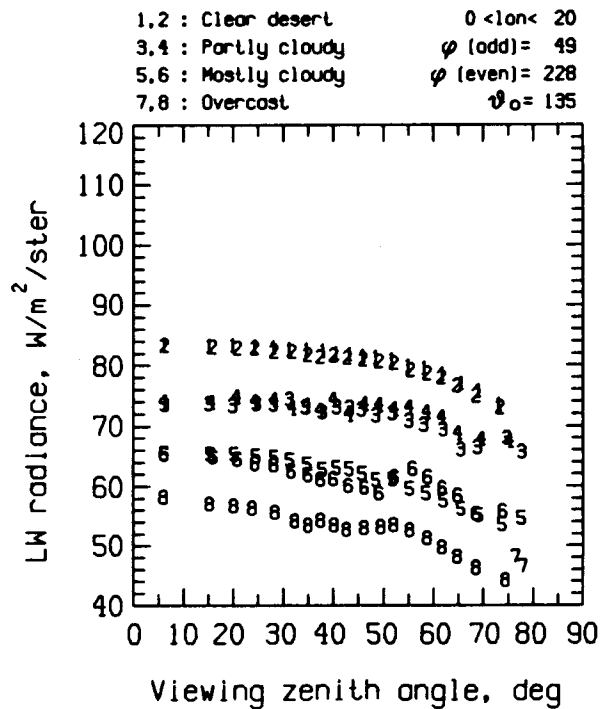


Figure 4.138 Sahara, Jan. 22.

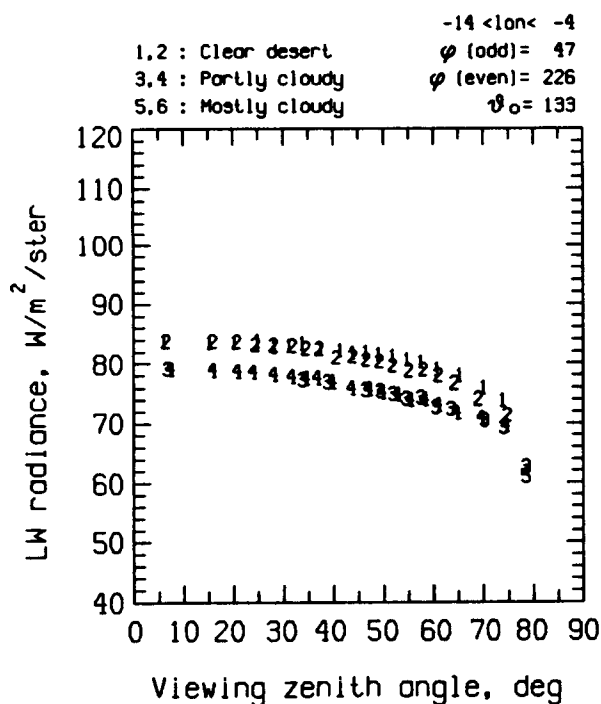


Figure 4.139 Sahara, Jan. 22.

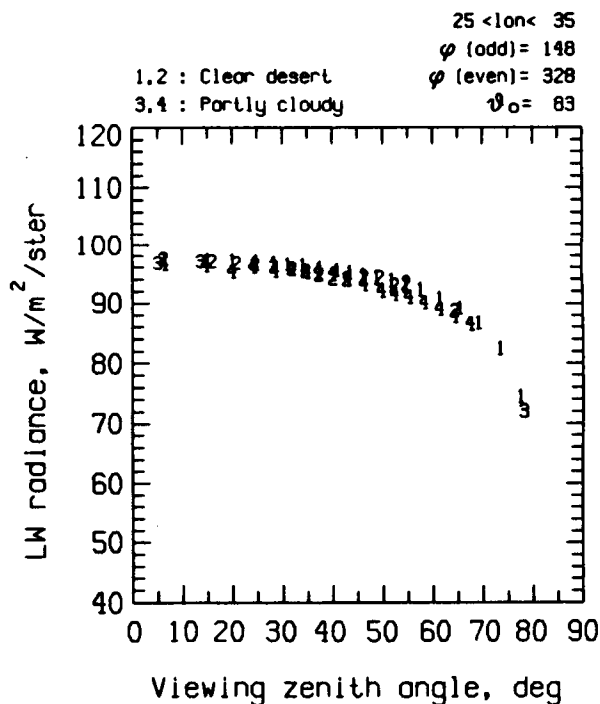


Figure 4.140 Sahara, Jan. 22.

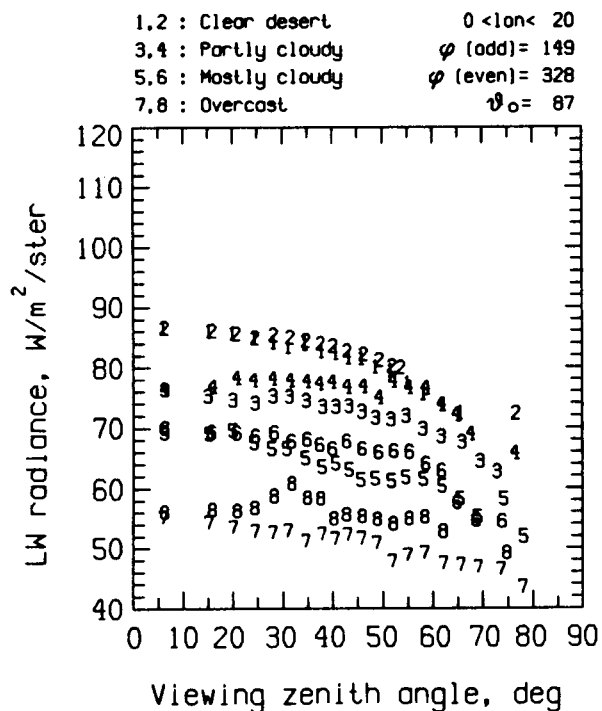


Figure 4.141 Sahara, Jan. 22.

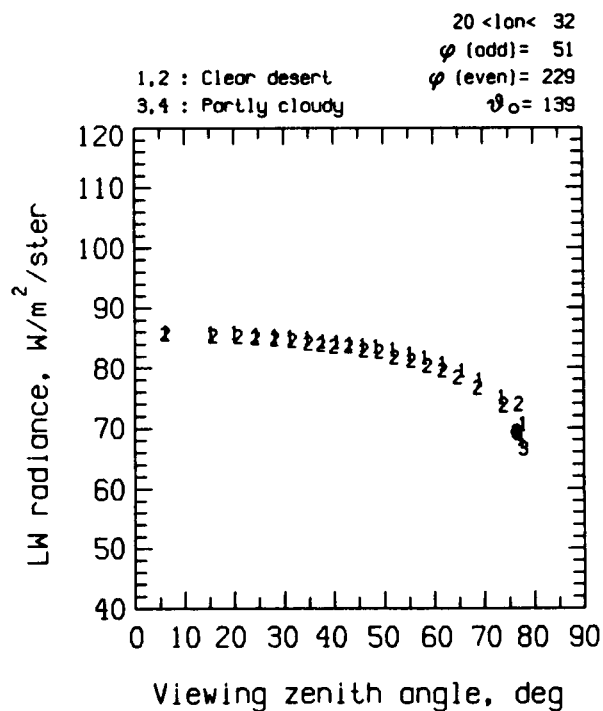


Figure 4.142 Sahara, Jan. 23.

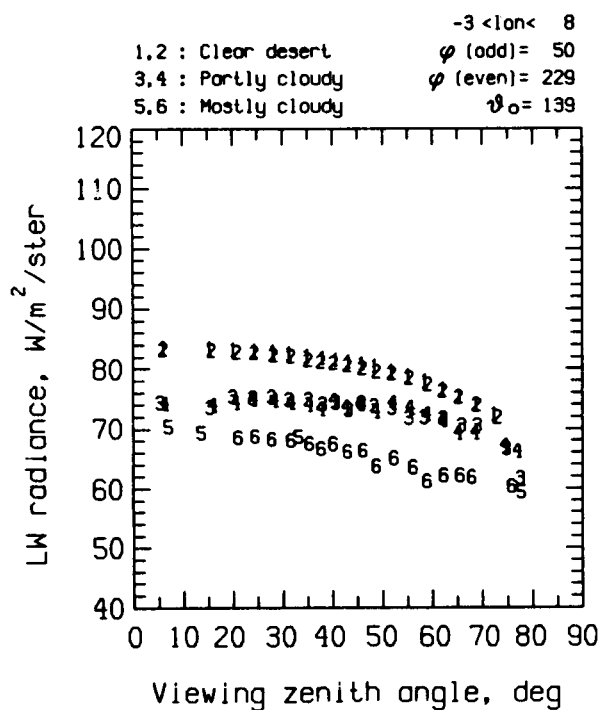


Figure 4.143 Sahara, Jan. 23.

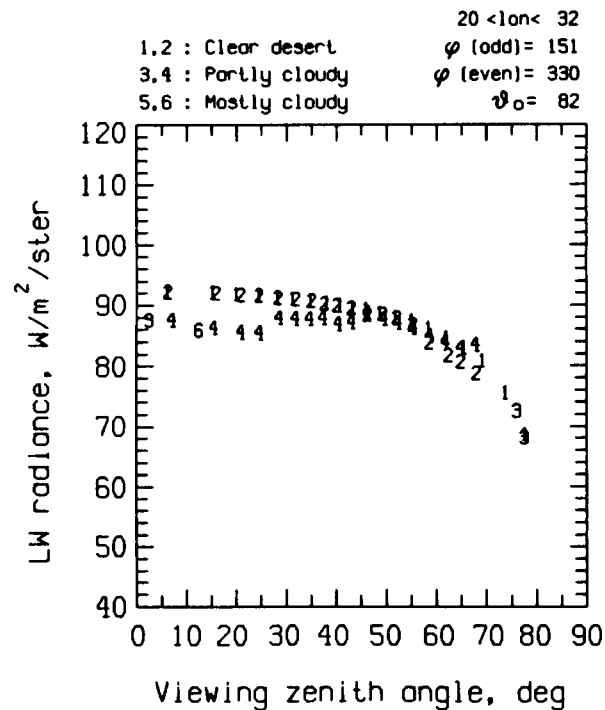


Figure 4.144 Sahara, Jan. 23.

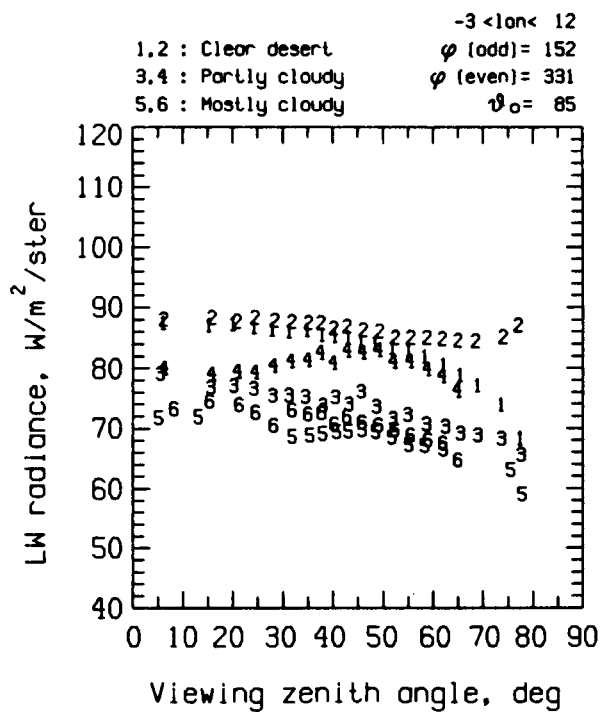


Figure 4.145 Sahara, Jan. 23.

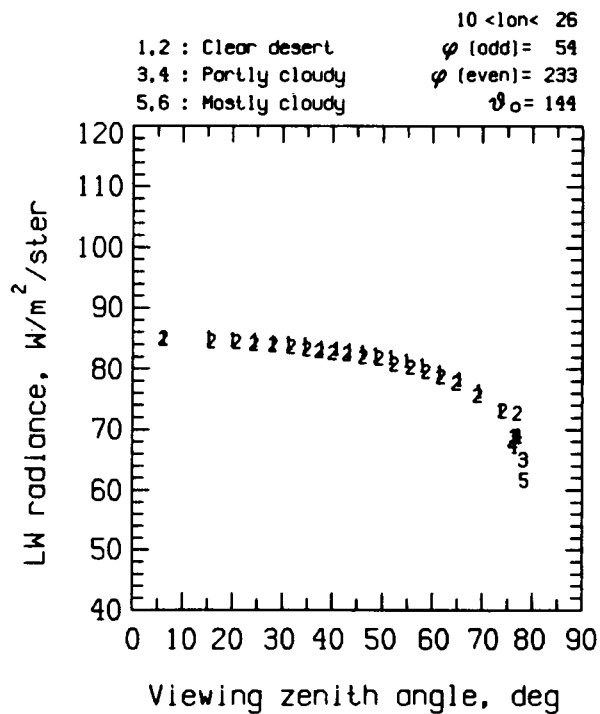


Figure 4.146 Sahara, Jan. 24.

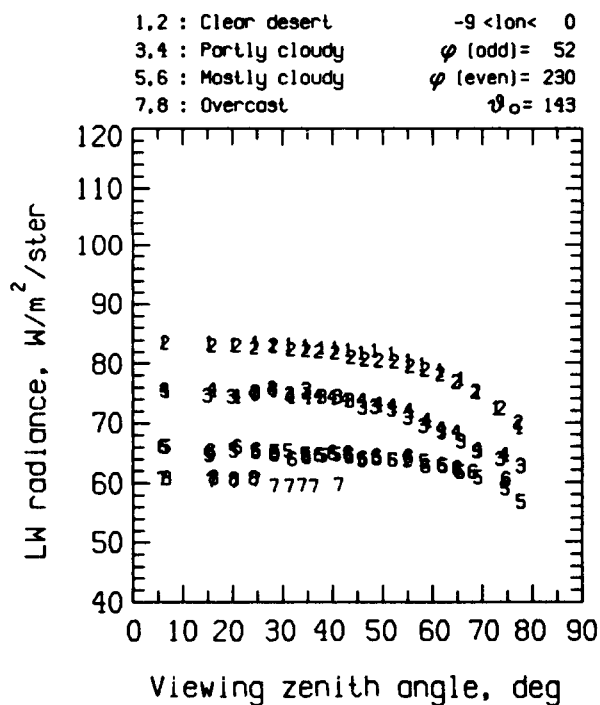


Figure 4.147 Sahara, Jan. 24.

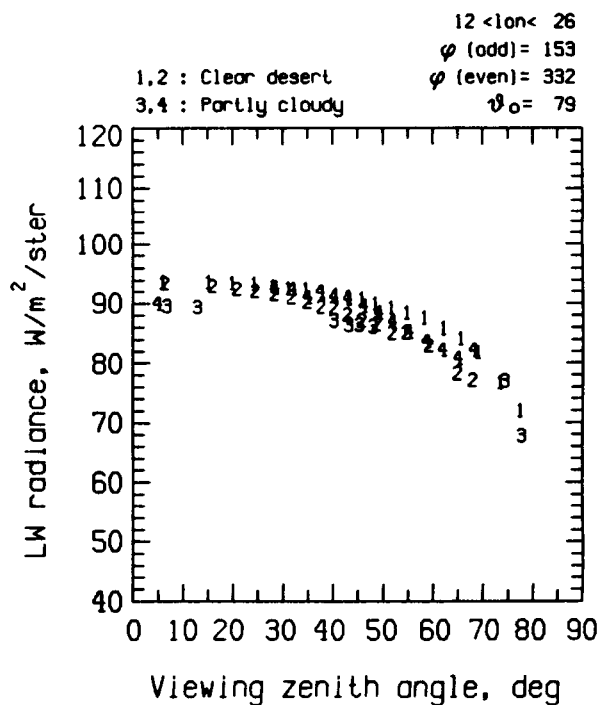


Figure 4.148 Sahara, Jan. 24.

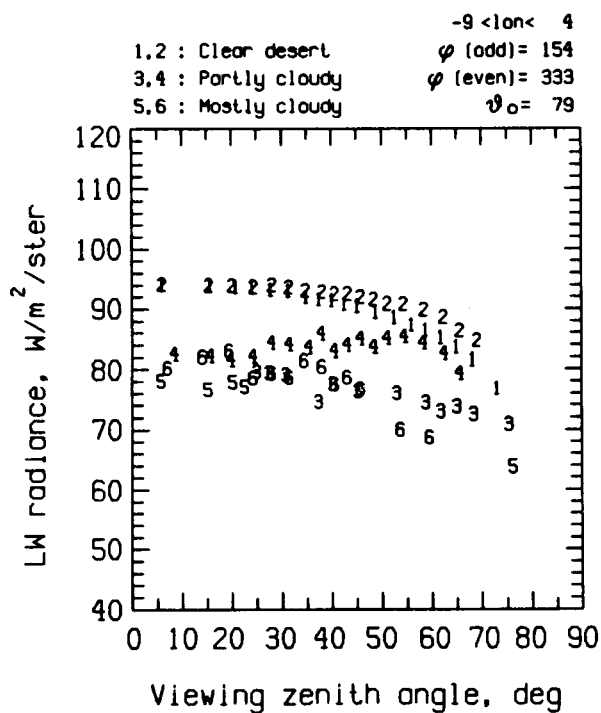


Figure 4.149 Sahara, Jan. 24.

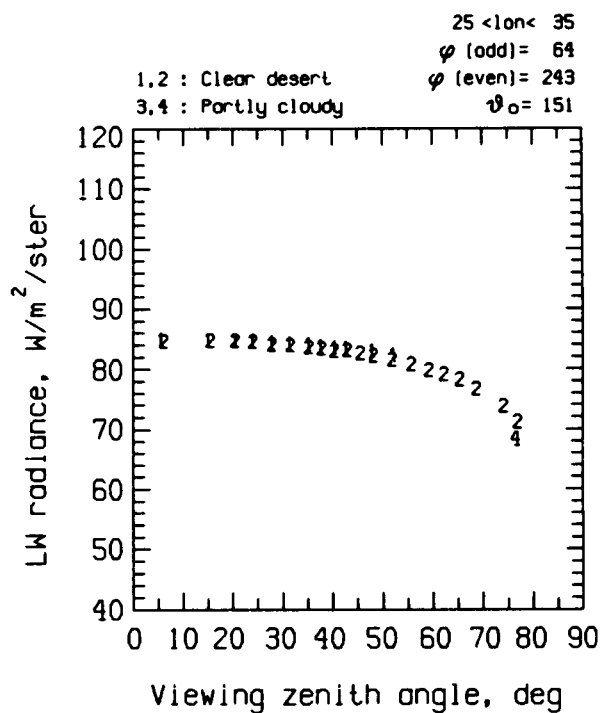


Figure 4.150 Sahara, Jan. 25.

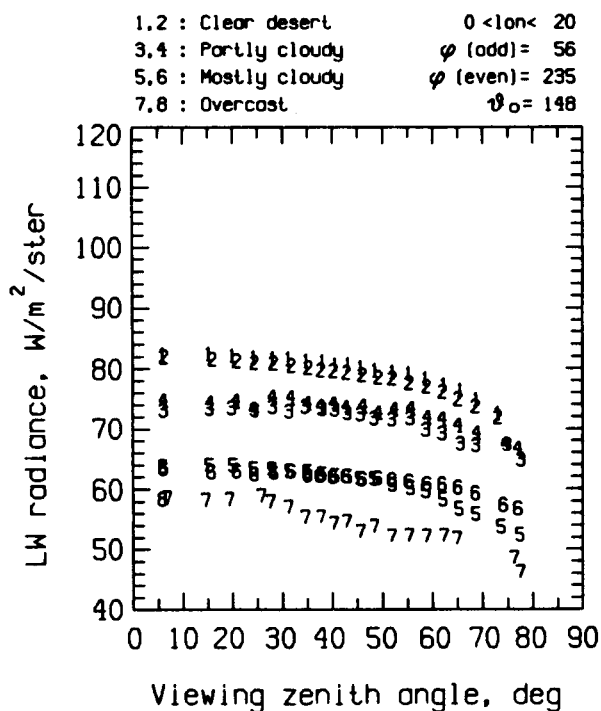


Figure 4.151 Sahara, Jan. 25.

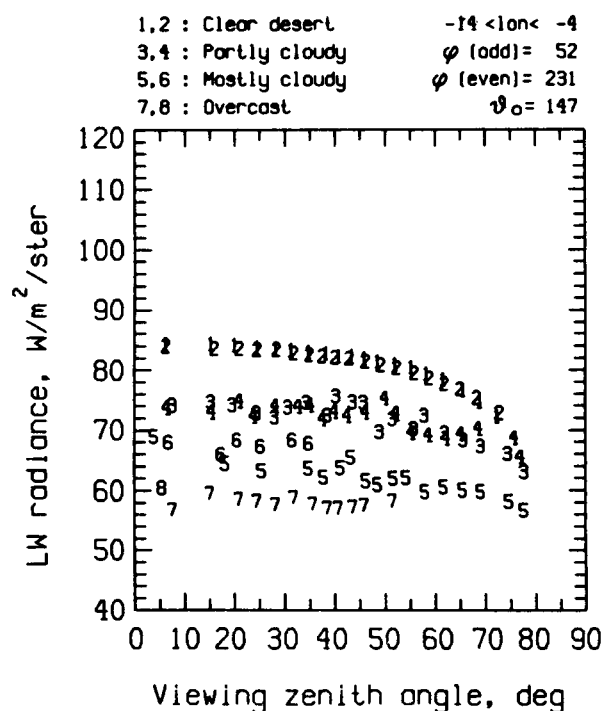


Figure 4.152 Sahara, Jan. 25.

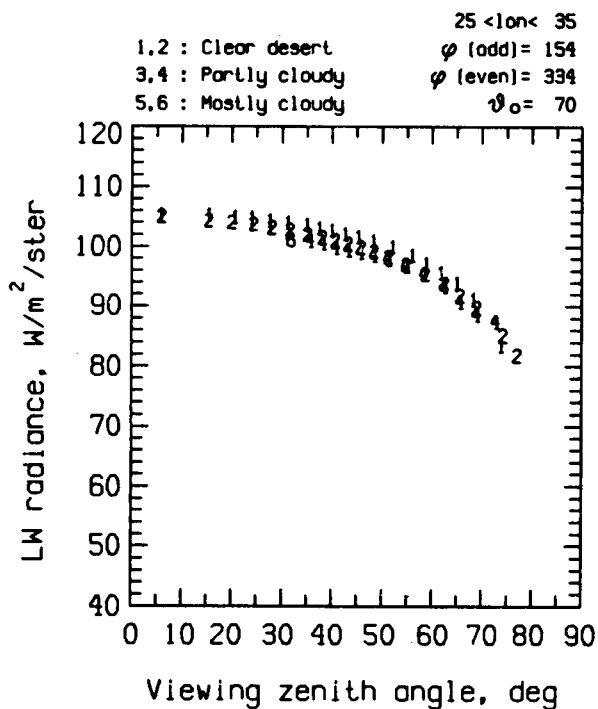


Figure 4.153 Sahara, Jan. 25.

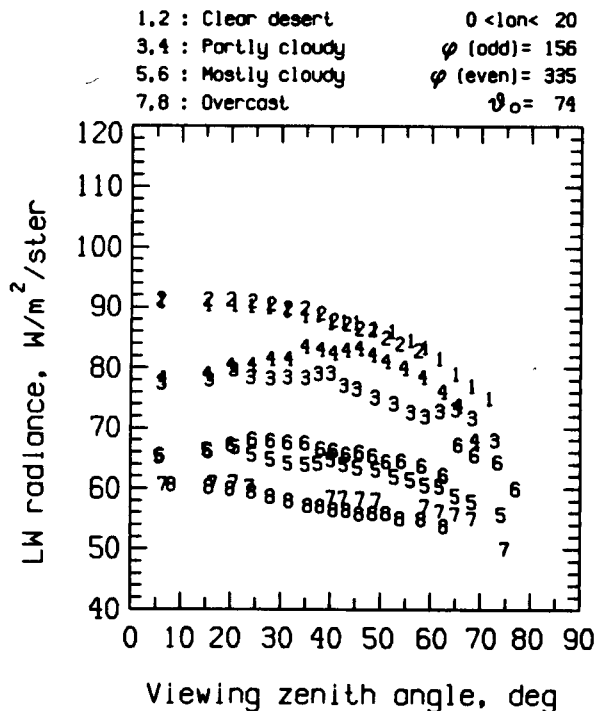


Figure 4.154 Sahara, Jan. 25.

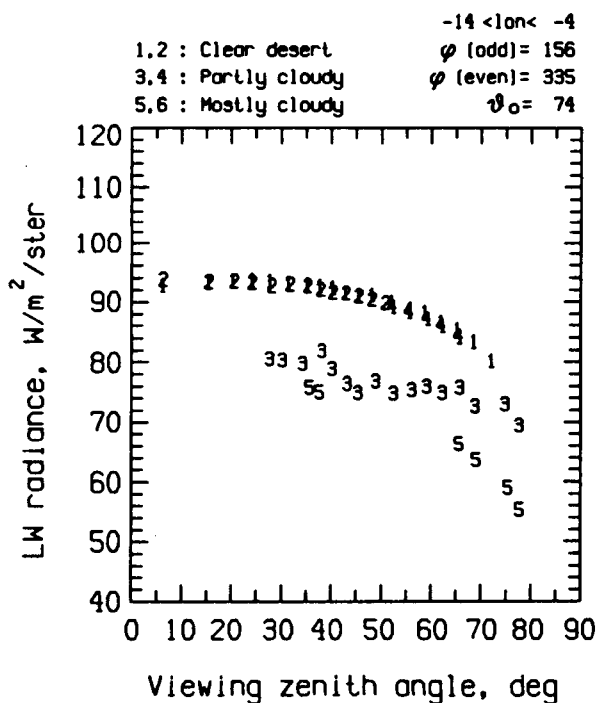


Figure 4.155 Sahara, Jan. 25.

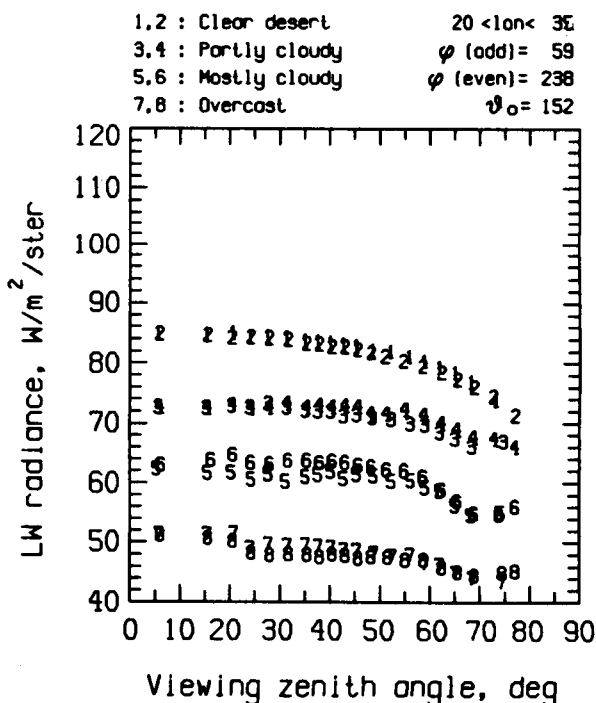


Figure 4.156 Sahara, Jan. 26.

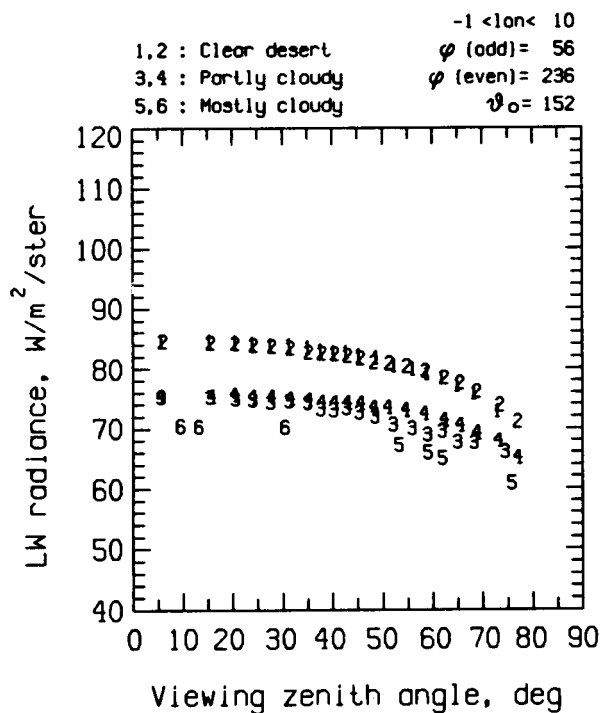


Figure 4.157 Sahara, Jan. 26.

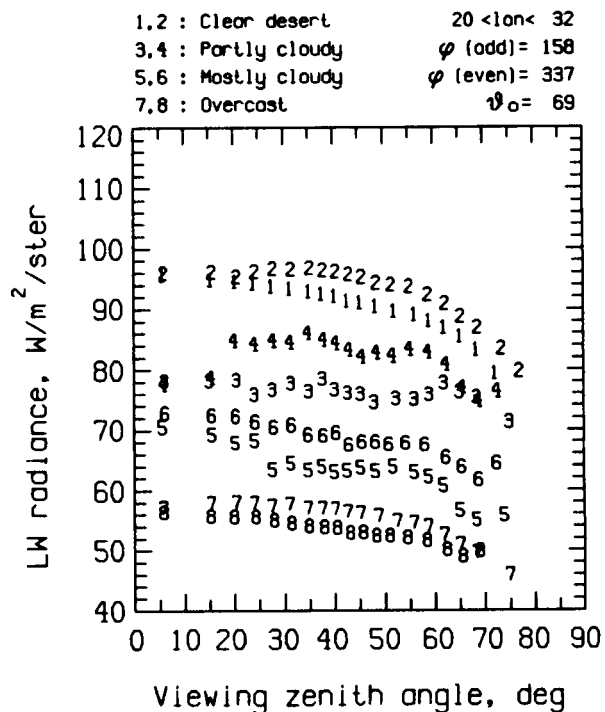


Figure 4.158 Sahara, Jan. 26.

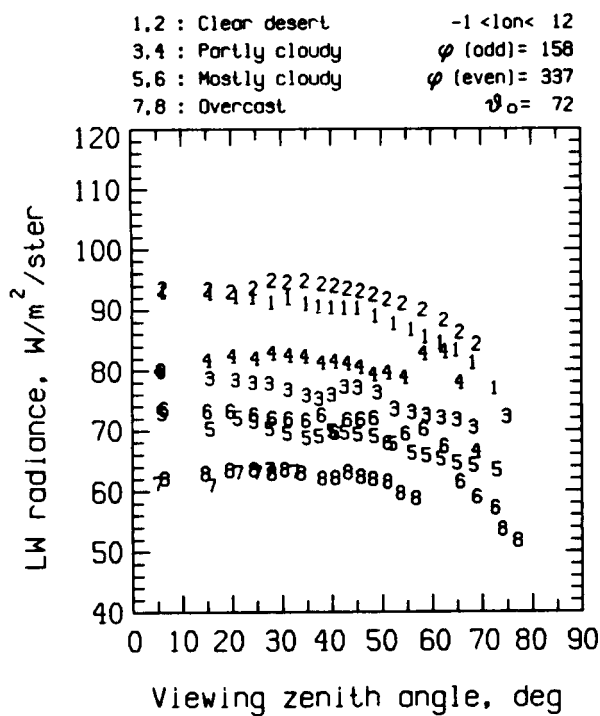


Figure 4.159 Sahara, Jan. 26.

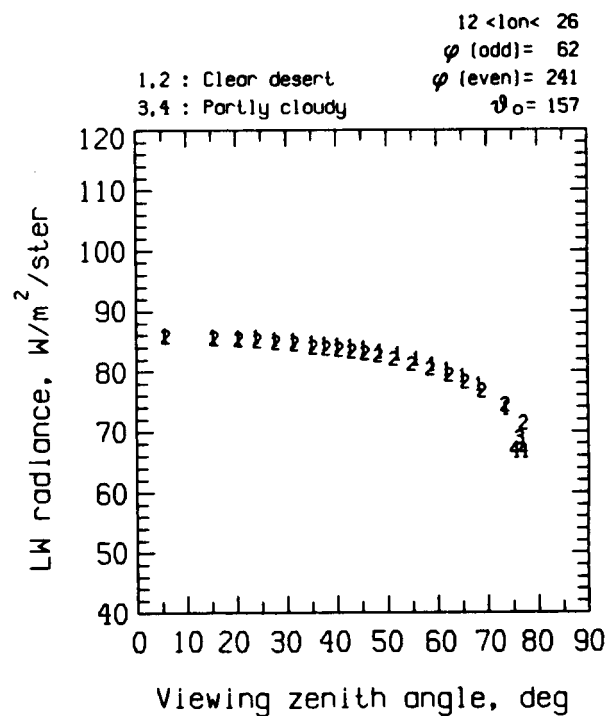


Figure 4.160 Sahara, Jan. 27.

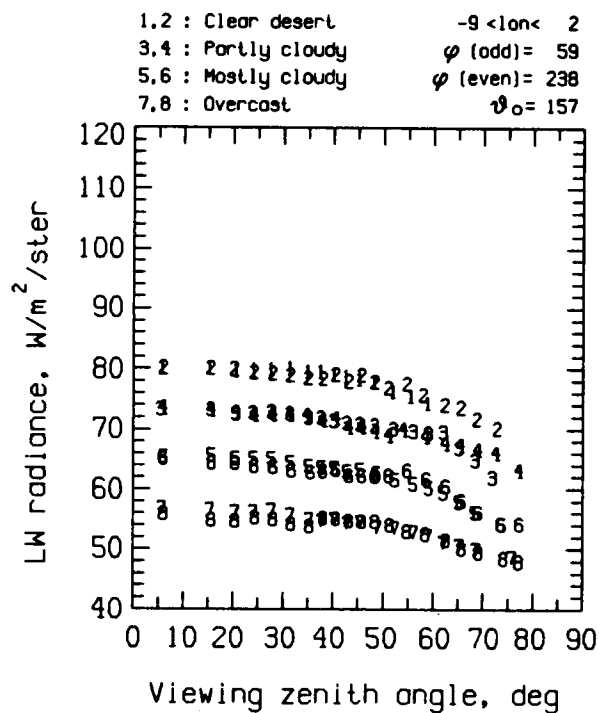


Figure 4.161 Sahara, Jan. 27.

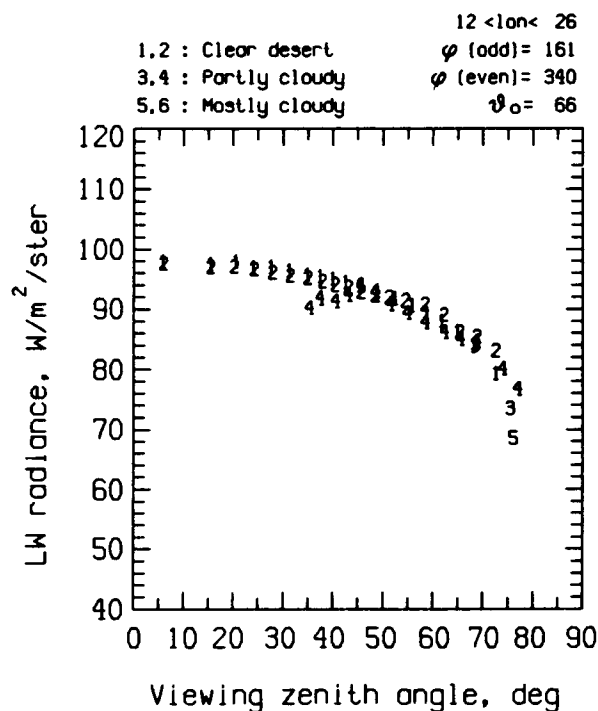


Figure 4.162 Sahara, Jan. 27.

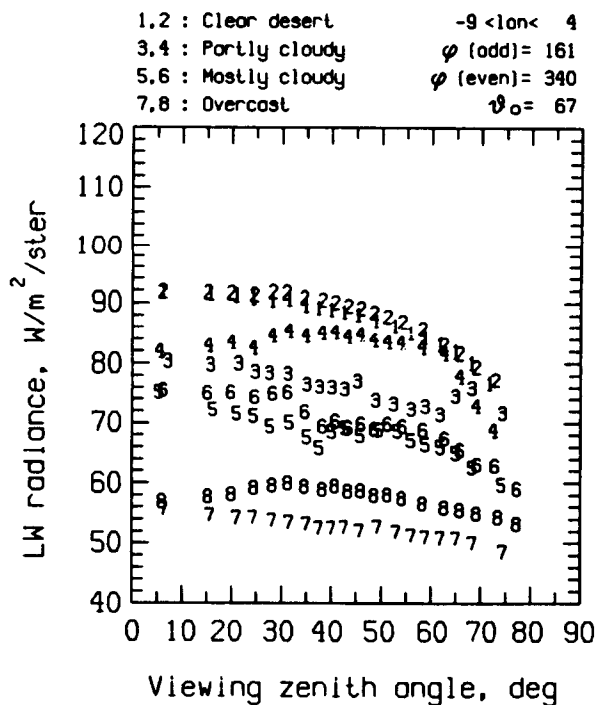


Figure 4.163 Sahara, Jan. 27.

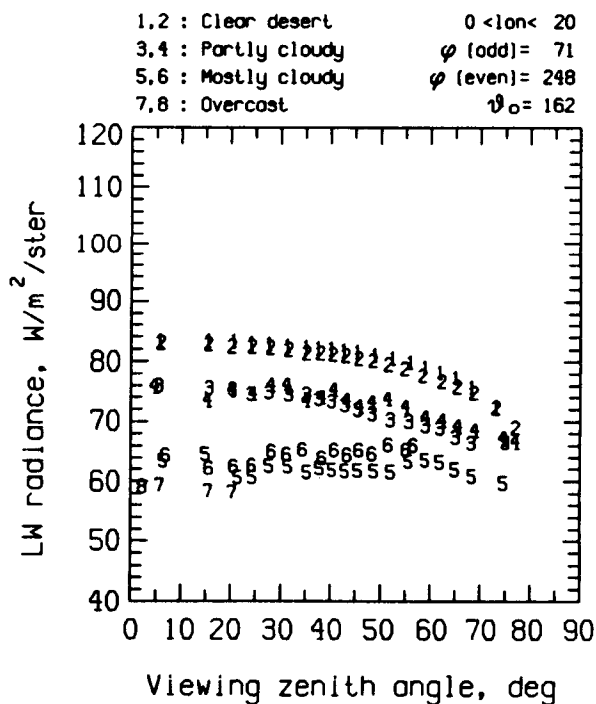


Figure 4.164 Sahara, Jan. 28.

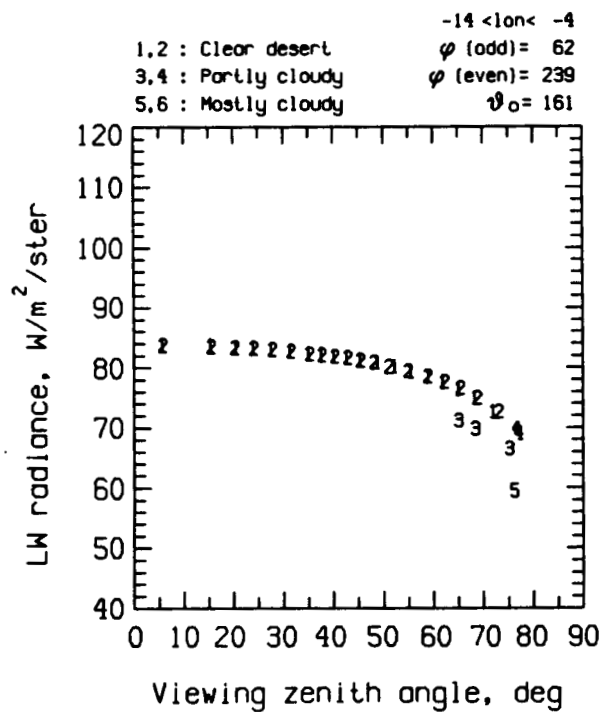


Figure 4.165 Sahara, Jan. 28.

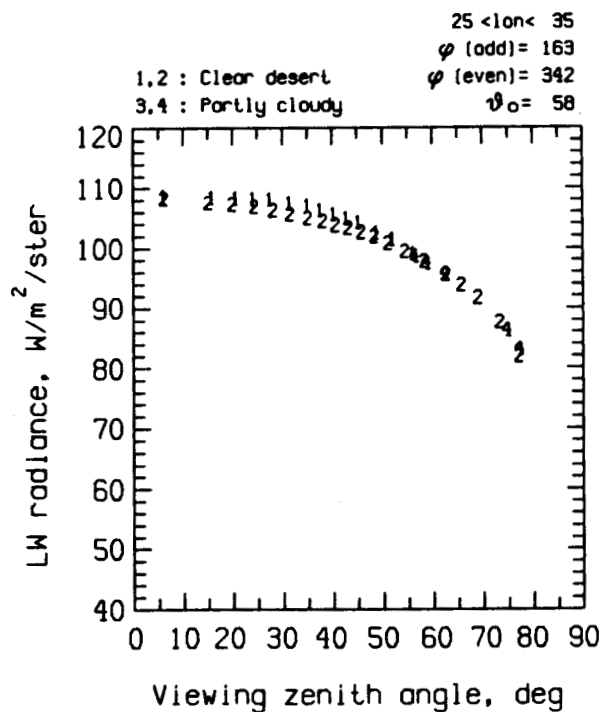


Figure 4.166 Sahara, Jan. 28.

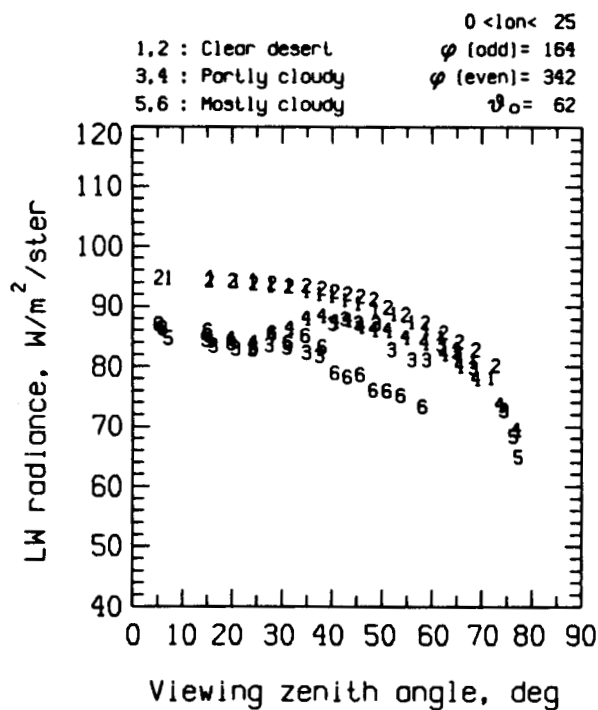


Figure 4.167 Sahara, Jan. 28.

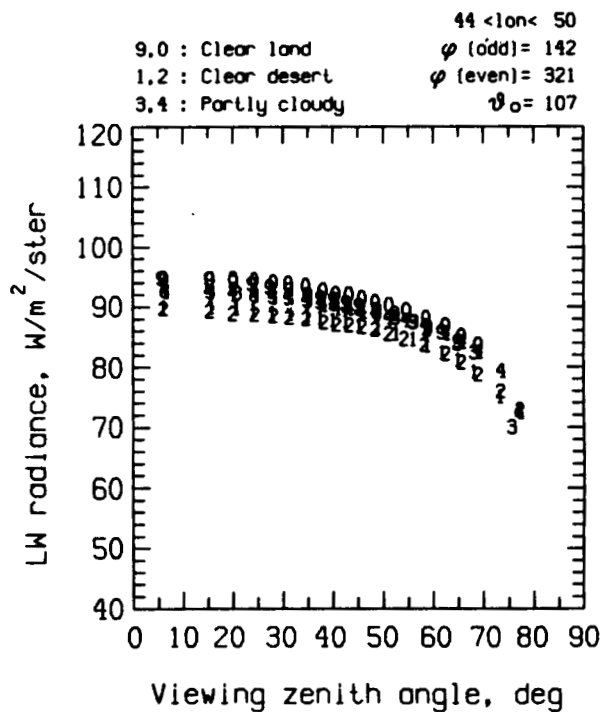


Figure 4.168 Arabian peninsula, Jan. 17.

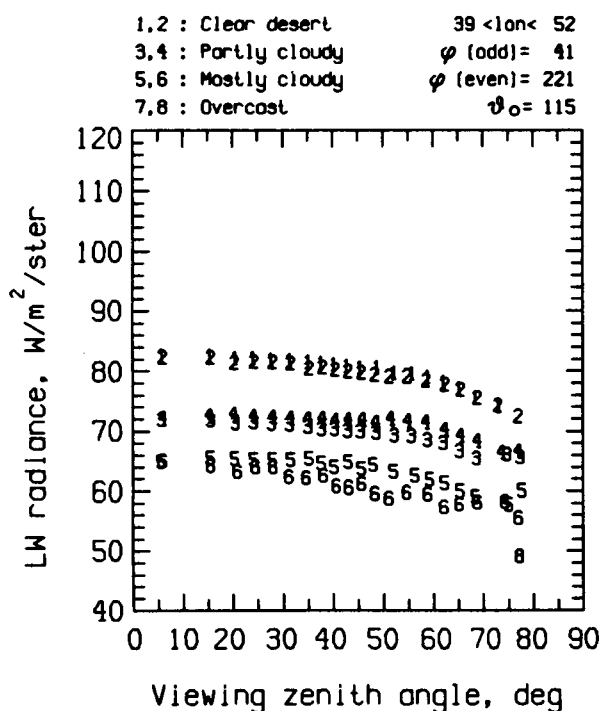


Figure 4.169 Arabian peninsula, Jan. 17.

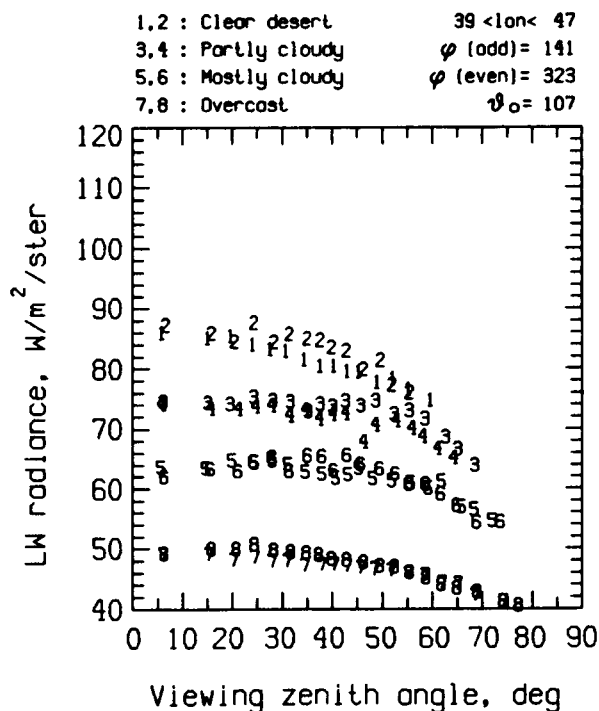


Figure 4.170 Arabian peninsula, Jan. 18.

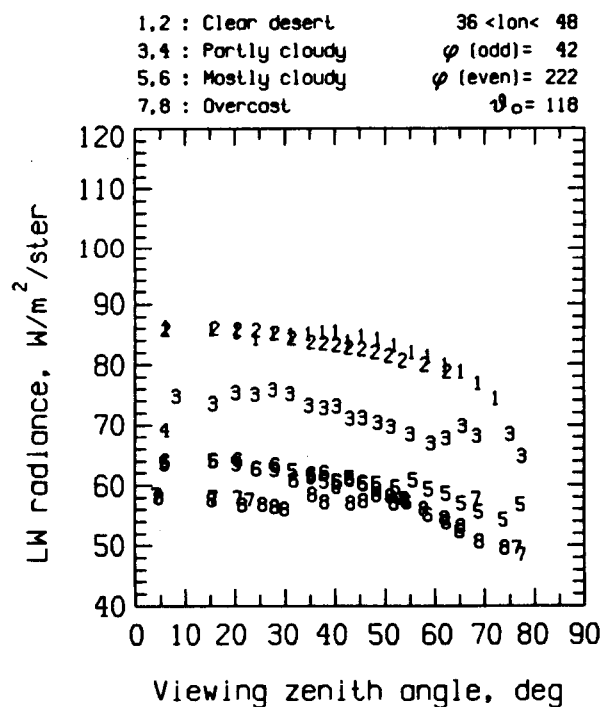


Figure 4.171 Arabian peninsula, Jan. 18.

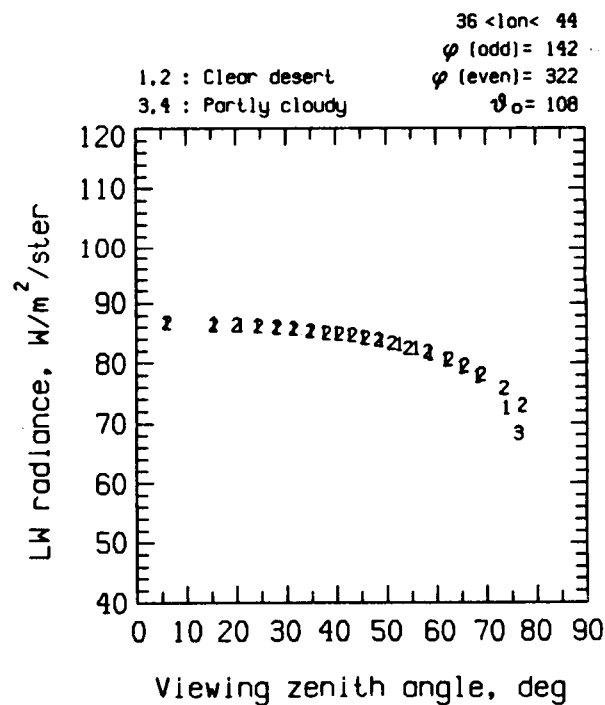


Figure 4.172 Arabian peninsula, Jan. 19.

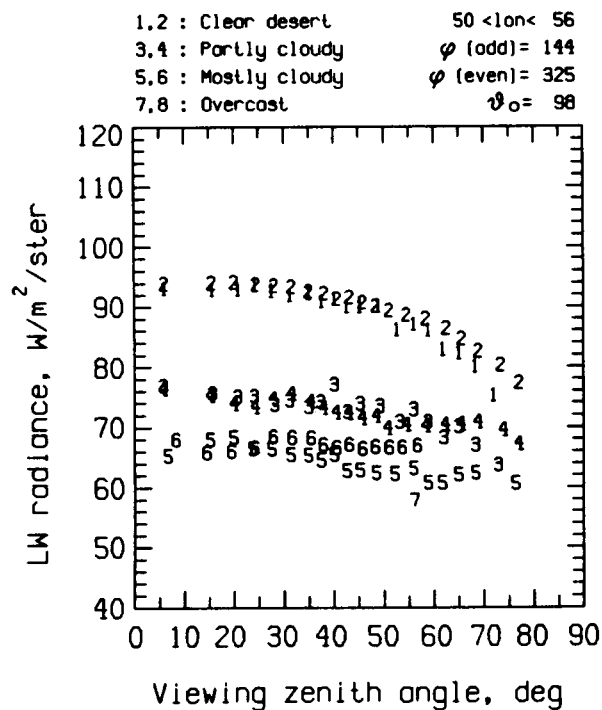


Figure 4.173 Arabian peninsula, Jan. 19.

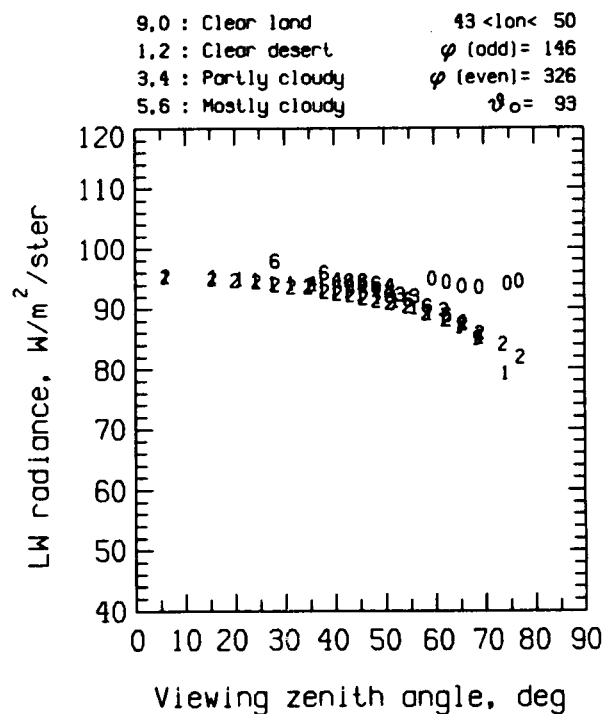


Figure 4.174 Arabian peninsula, Jan. 20.

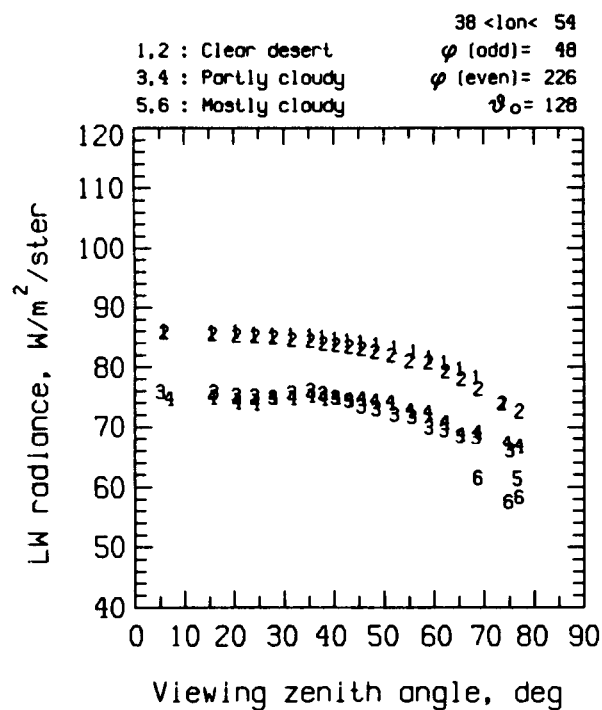


Figure 4.175 Arabian peninsula, Jan. 20.

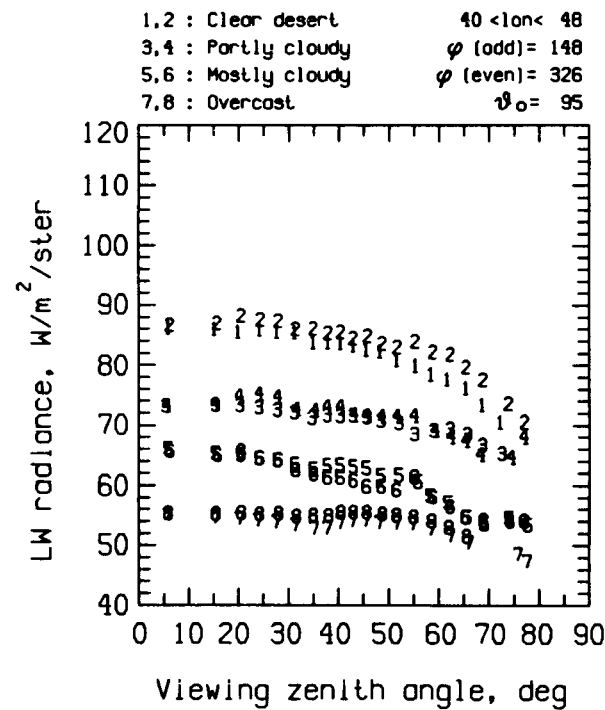


Figure 4.176 Arabian peninsula, Jan. 21.

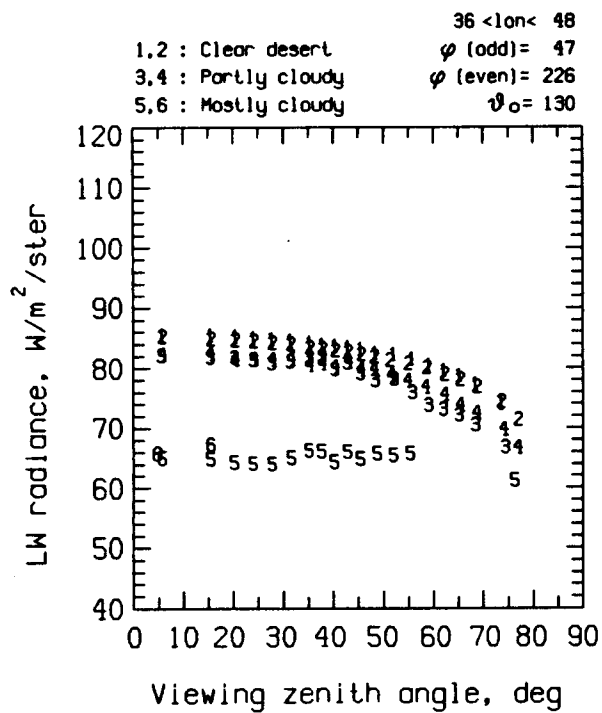


Figure 4.177 Arabian peninsula, Jan. 21.

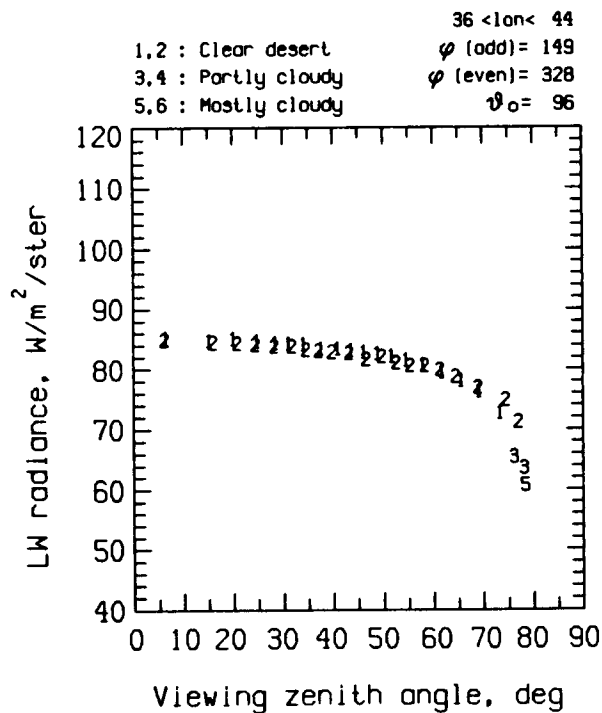


Figure 4.178 Arabian peninsula, Jan. 22.

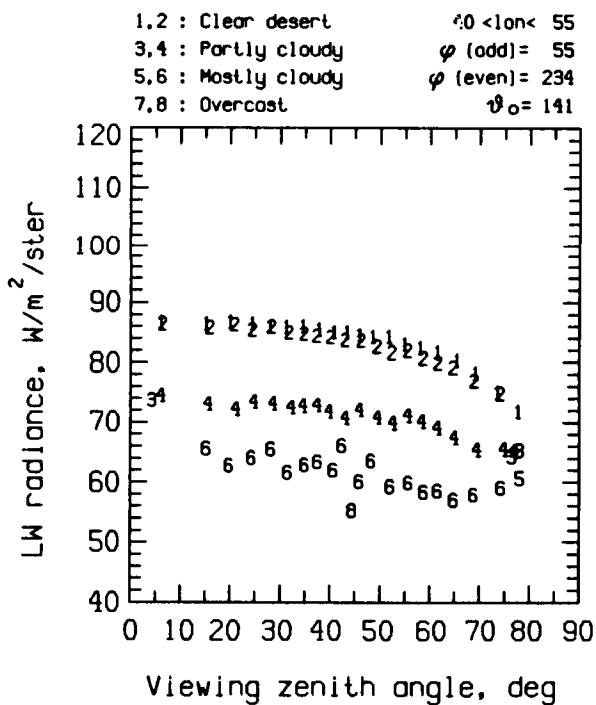


Figure 4.179 Arabian peninsula, Jan. 22.

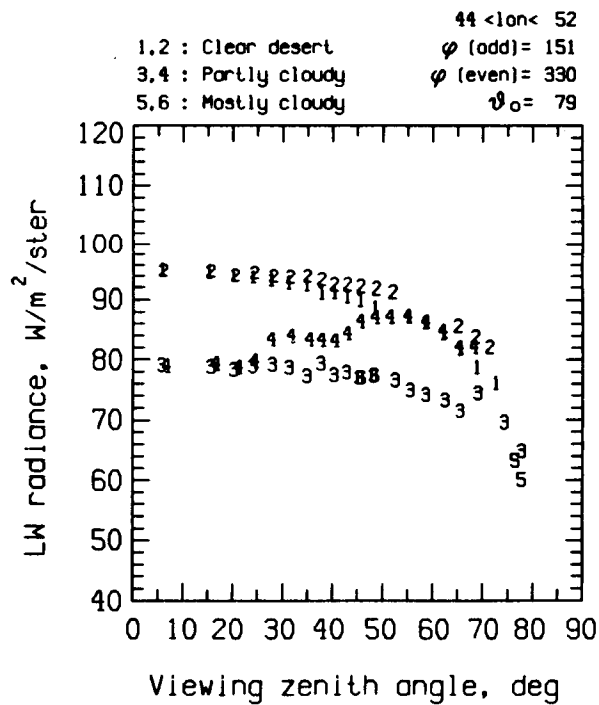


Figure 4.180 Arabian peninsula, Jan. 23.

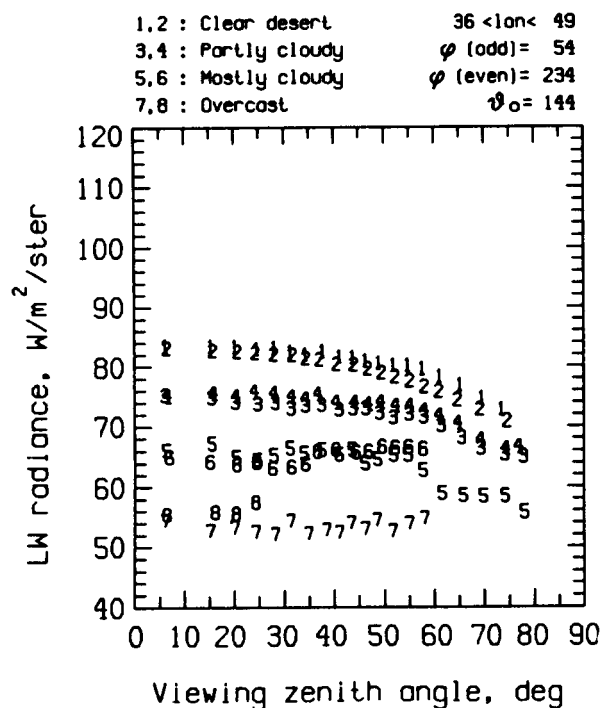


Figure 4.181 Arabian peninsula, Jan. 23.

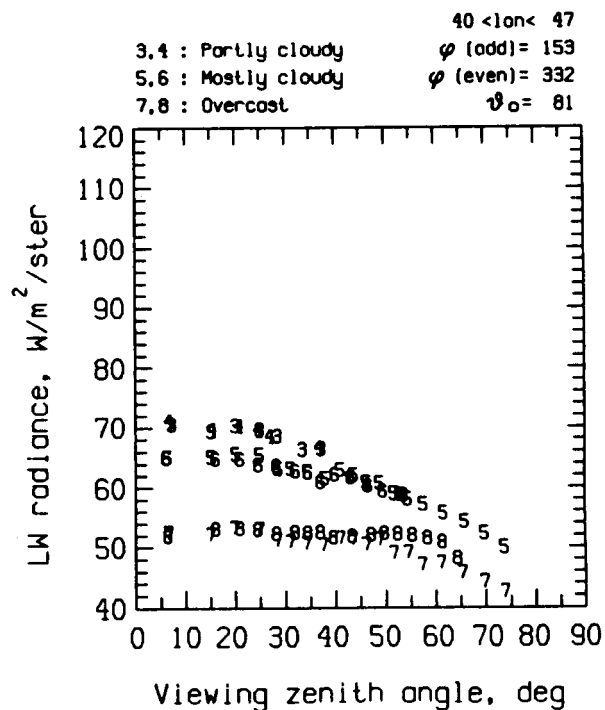


Figure 4.182 Arabian peninsula, Jan. 24.

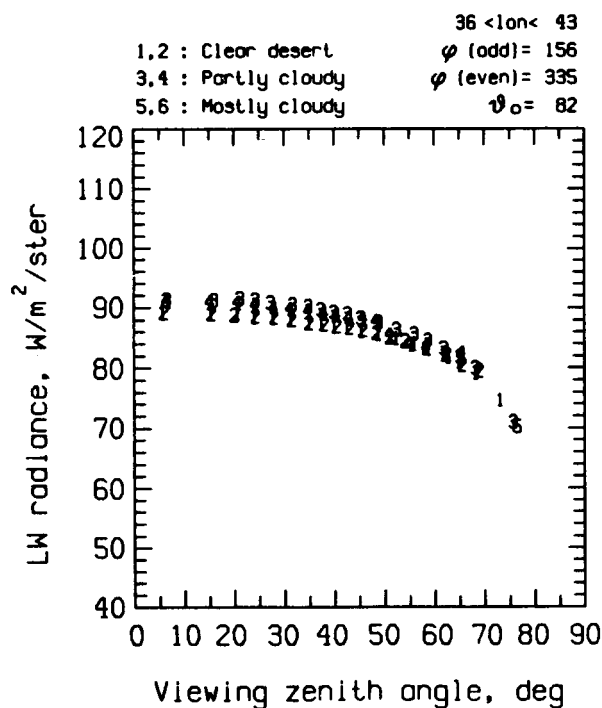


Figure 4.183 Arabian peninsula, Jan. 25.

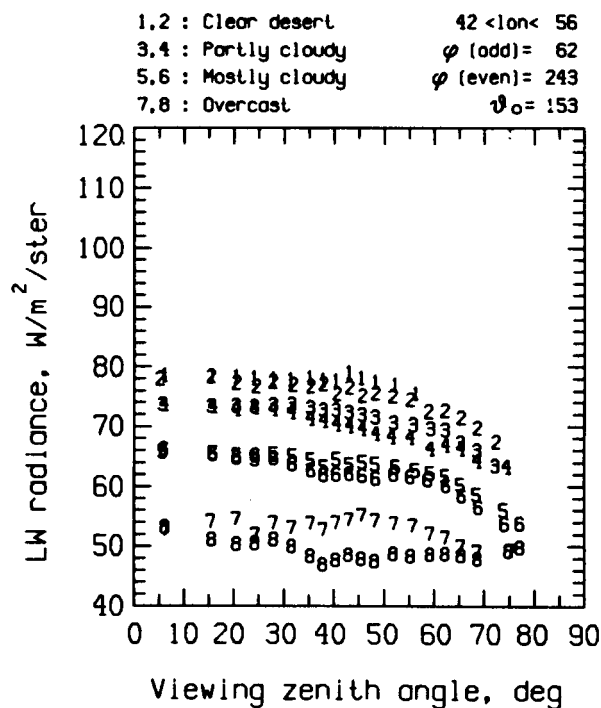


Figure 4.184 Arabian peninsula, Jan. 25.

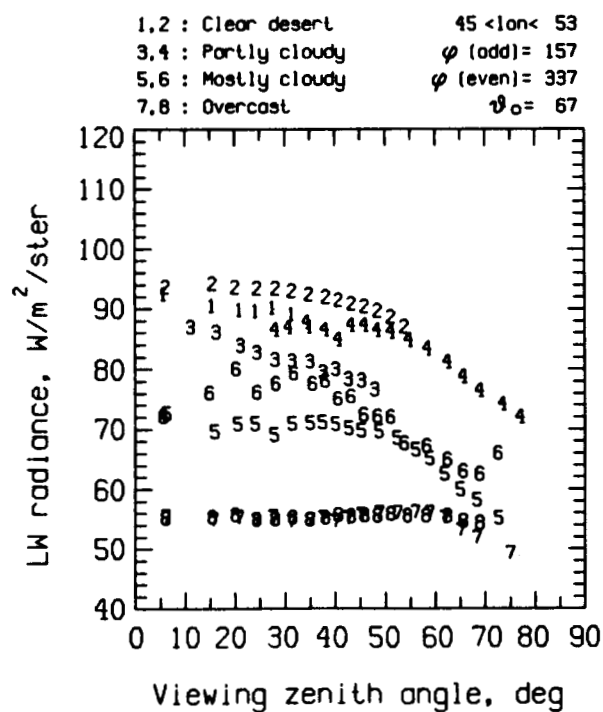


Figure 4.185 Arabian peninsula, Jan. 26.

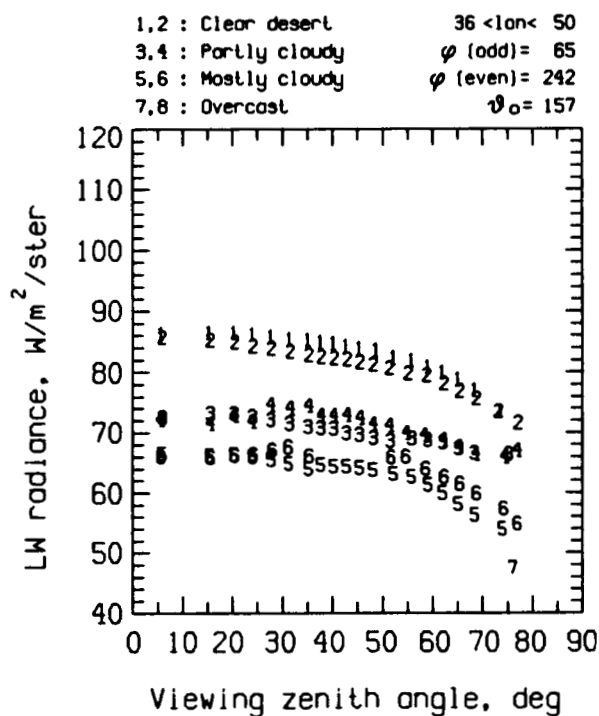


Figure 4.186 Arabian peninsula, Jan. 26.

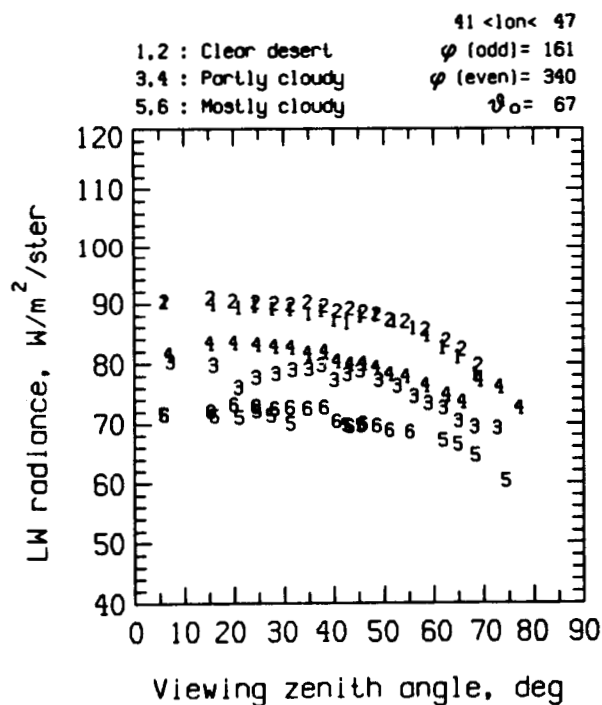


Figure 4.187 Arabian peninsula, Jan. 27.

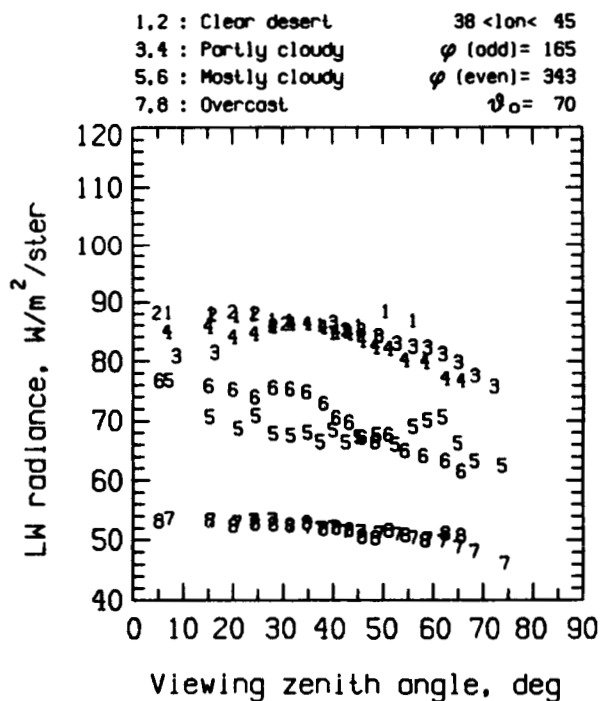


Figure 4.188 Arabian peninsula, Jan. 28.

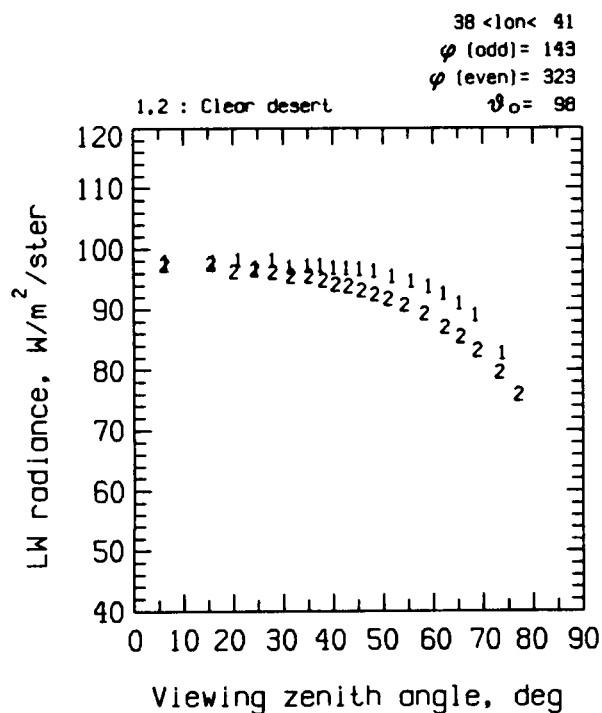


Figure 4.189 Sahel, Jan. 17.

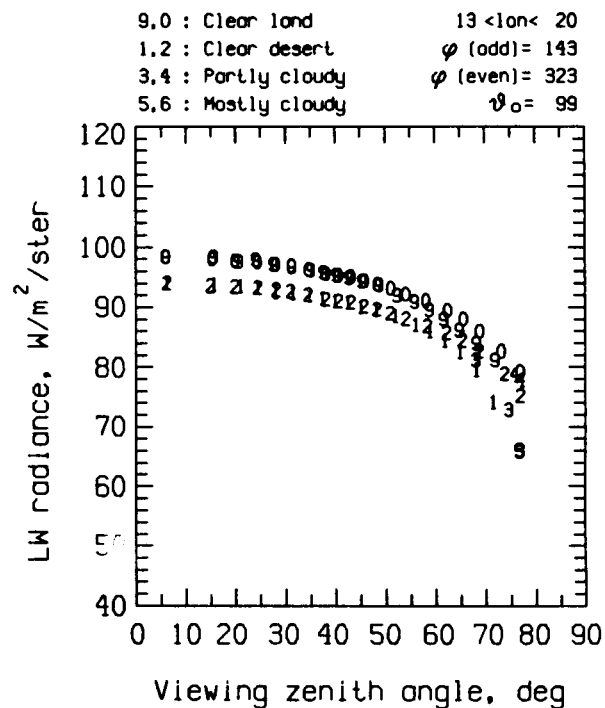


Figure 4.190 Sahel, Jan. 17.

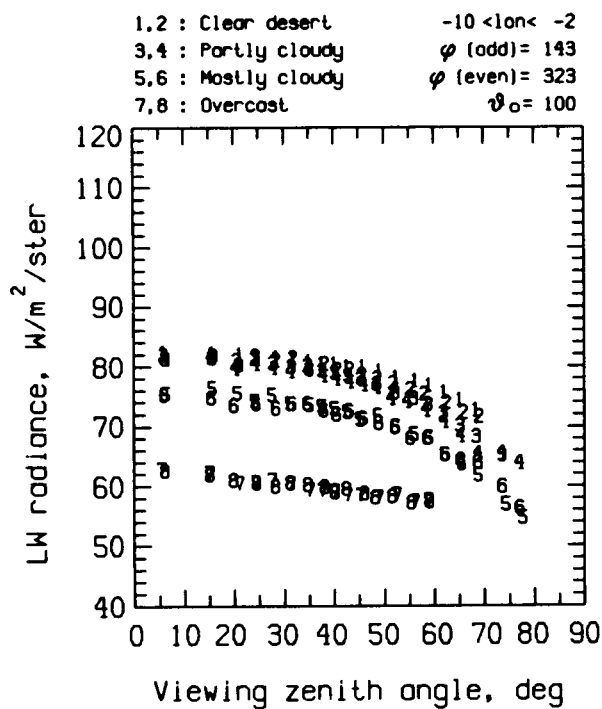


Figure 4.191 Sahel, Jan. 17.

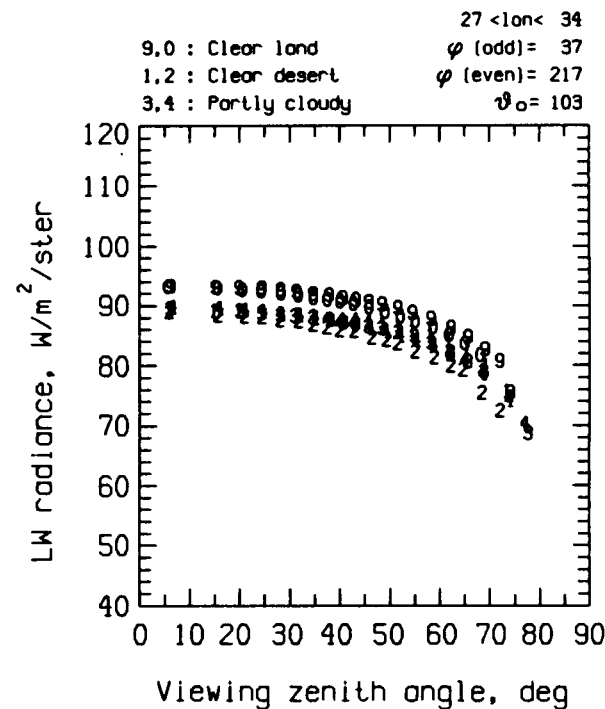


Figure 4.192 Sahel, Jan. 17.

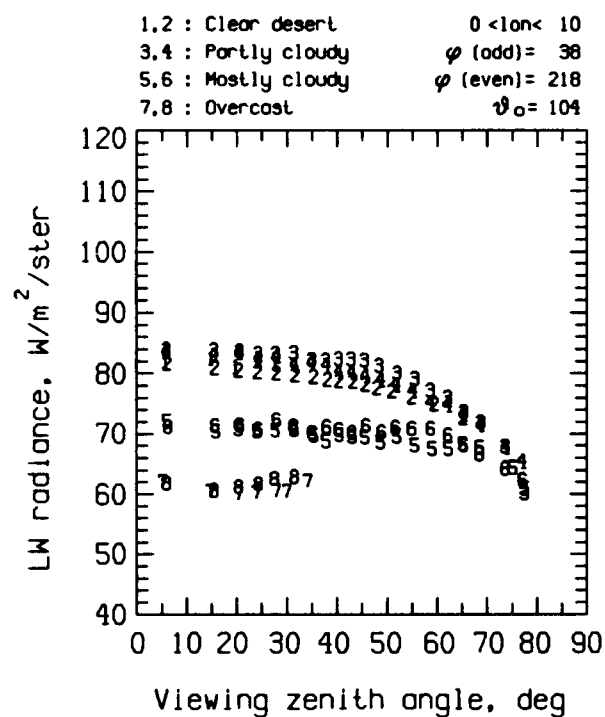


Figure 4.193 Sahel, Jan. 17.

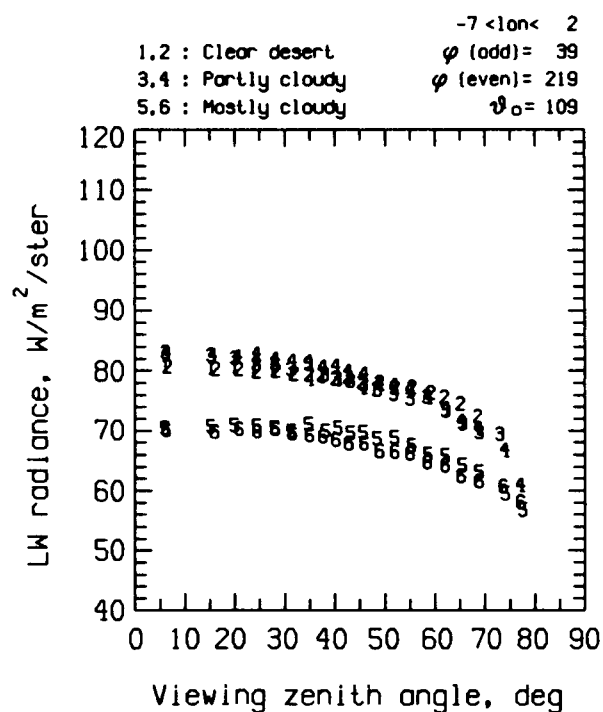


Figure 4.194 Sahel, Jan. 18.

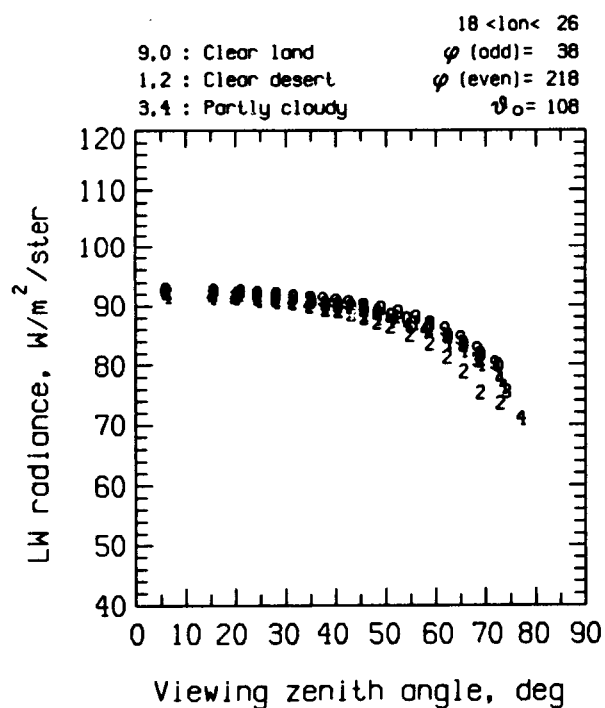


Figure 4.195 Sahel, Jan. 18.

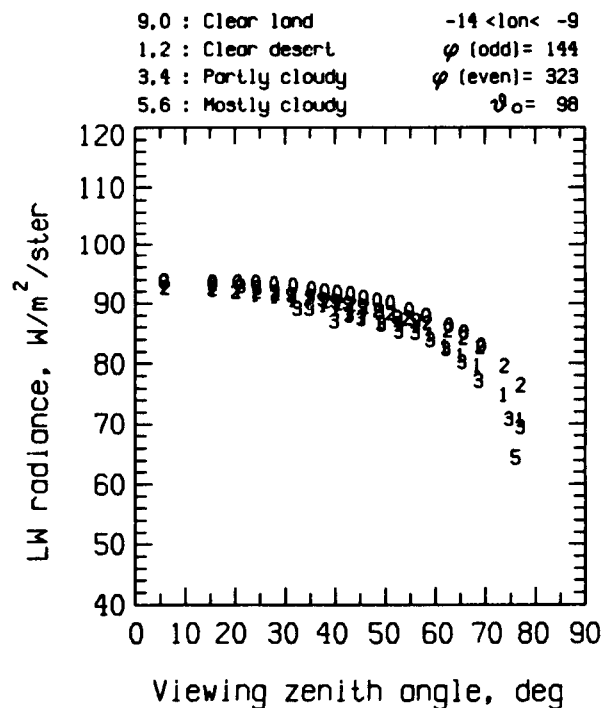


Figure 4.196 Sahel, Jan. 18.

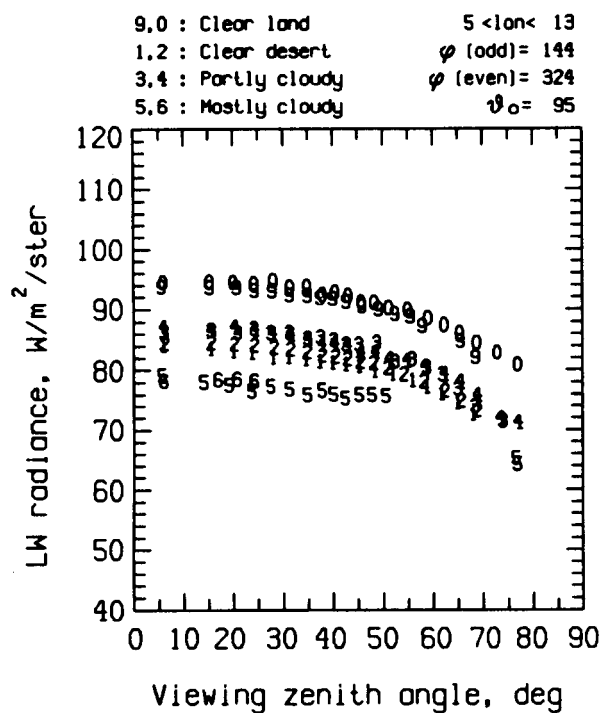


Figure 4.197 Sahel, Jan. 18.

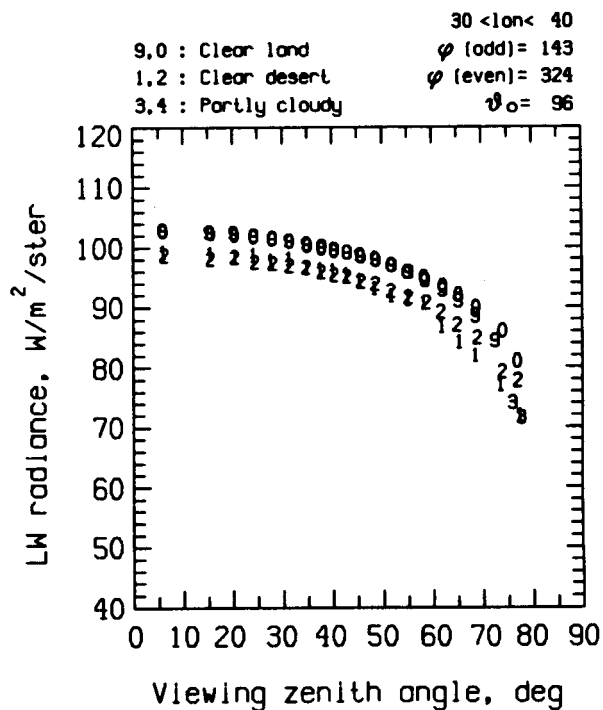


Figure 4.198 Sahel, Jan. 18.

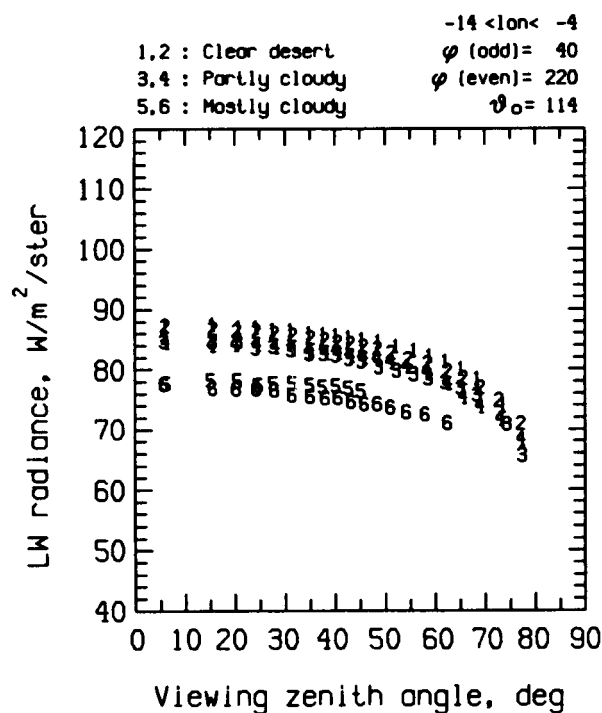


Figure 4.199 Sahel, Jan. 19.

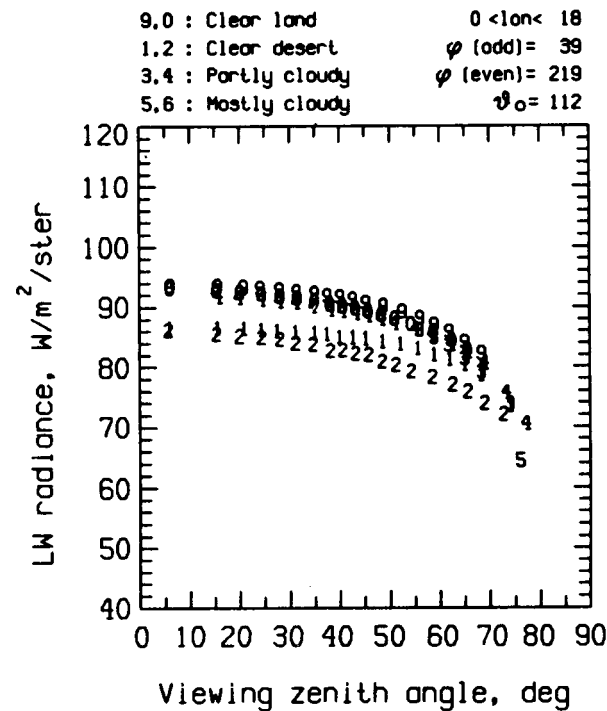


Figure 4.200 Sahel, Jan. 19.

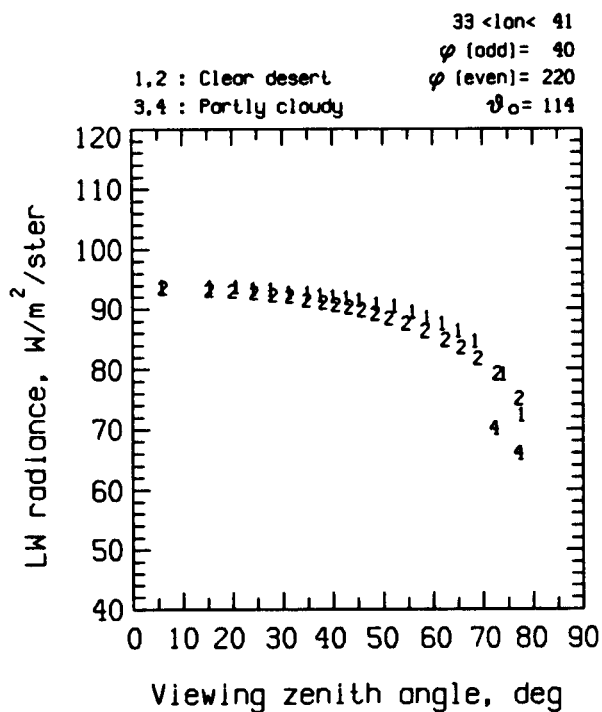


Figure 4.201 Sahel, Jan. 19.

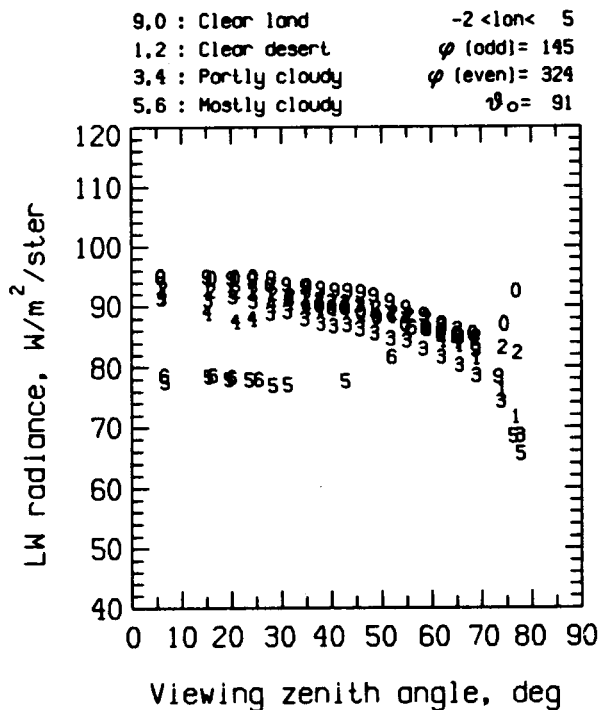


Figure 4.202 Sahel, Jan. 19.

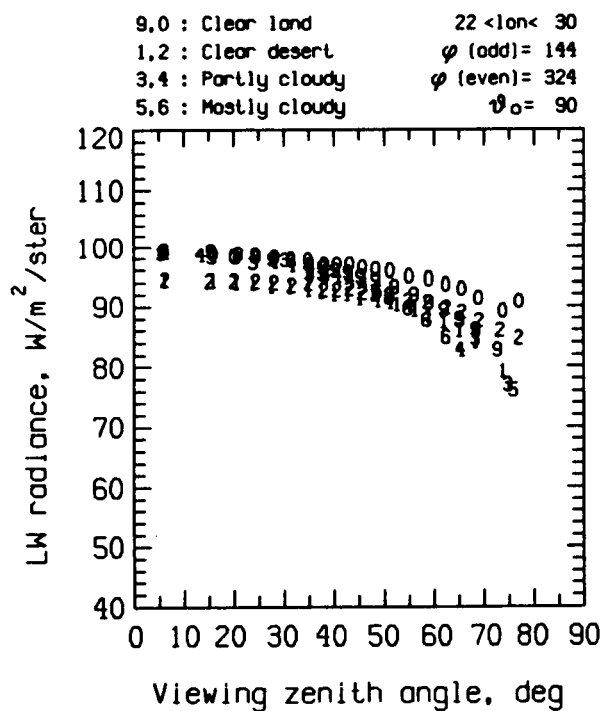


Figure 4.203 Sahel, Jan. 19.

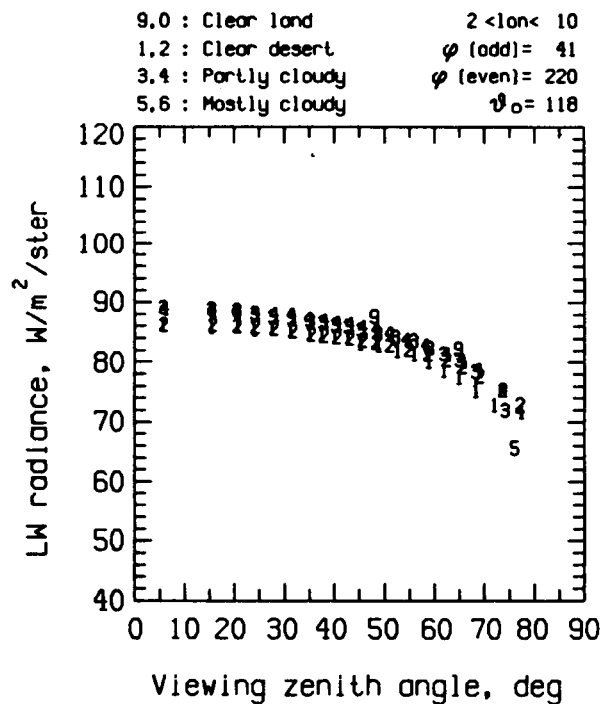


Figure 4.204 Sahel, Jan. 20.

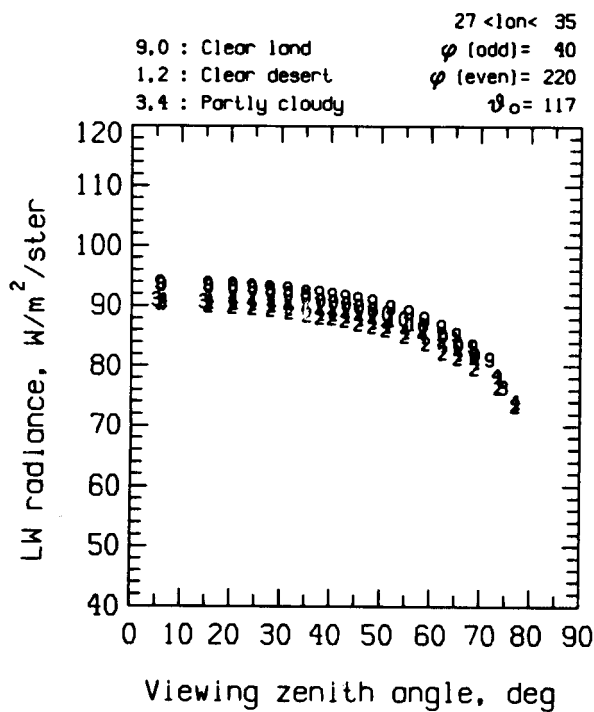


Figure 4.205 Sahel, Jan. 20.

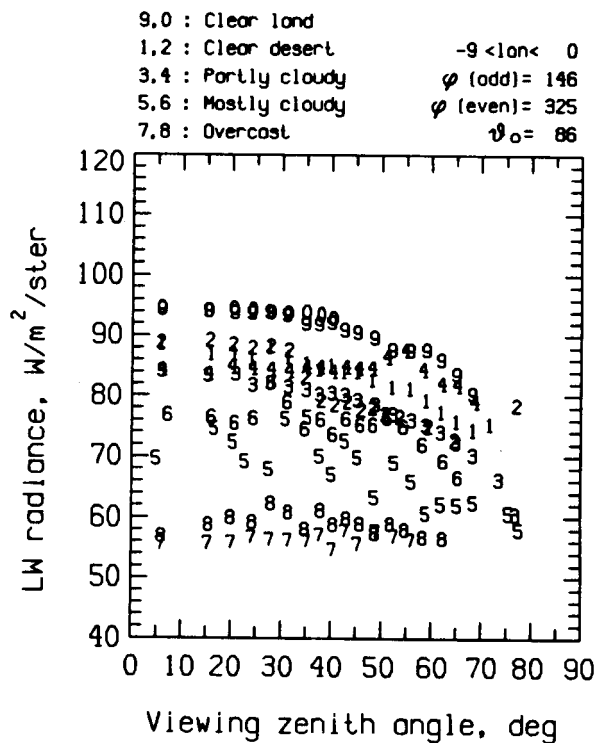


Figure 4.206 Sahel, Jan. 20.

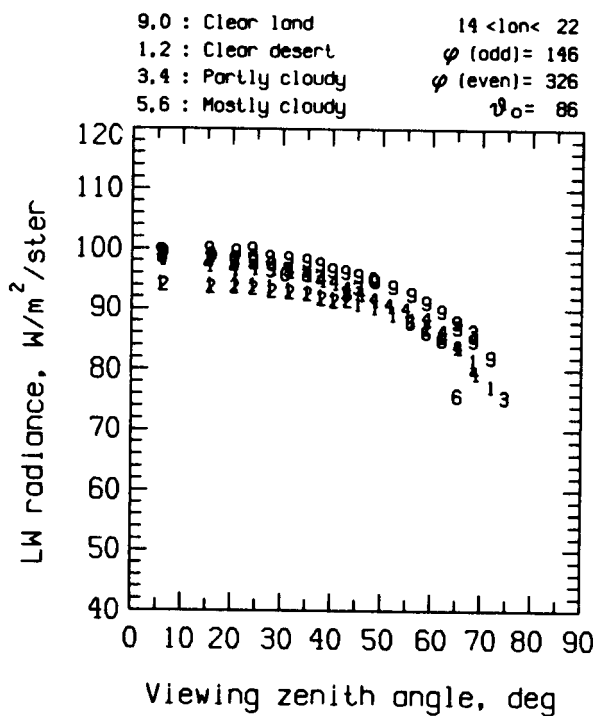


Figure 4.207 Sahel, Jan. 20.

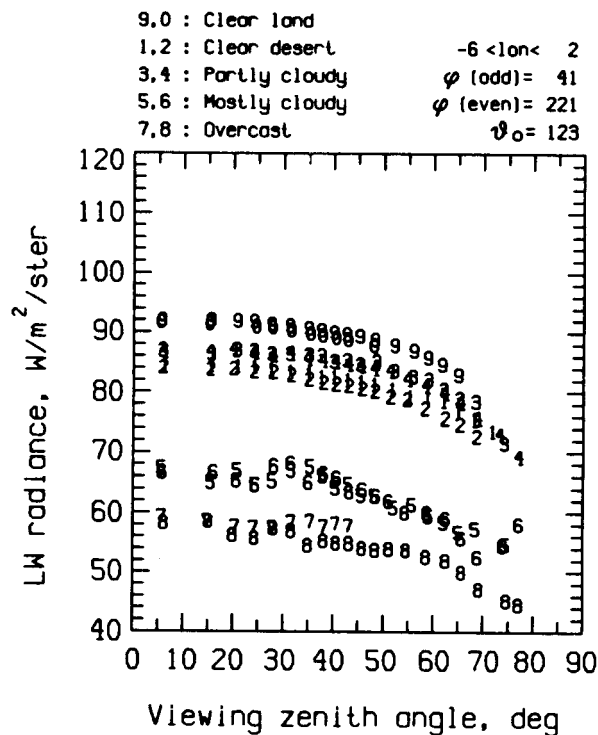


Figure 4.208 Sahel, Jan. 21.

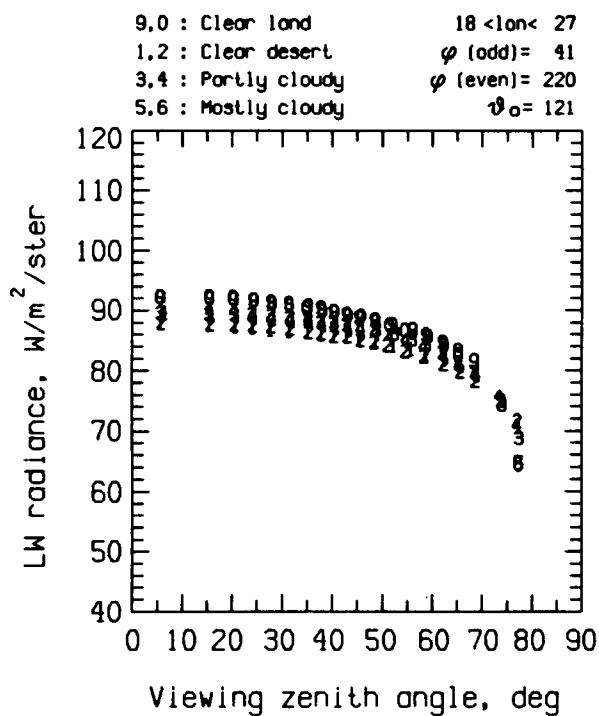


Figure 4.209 Sahel, Jan. 21.

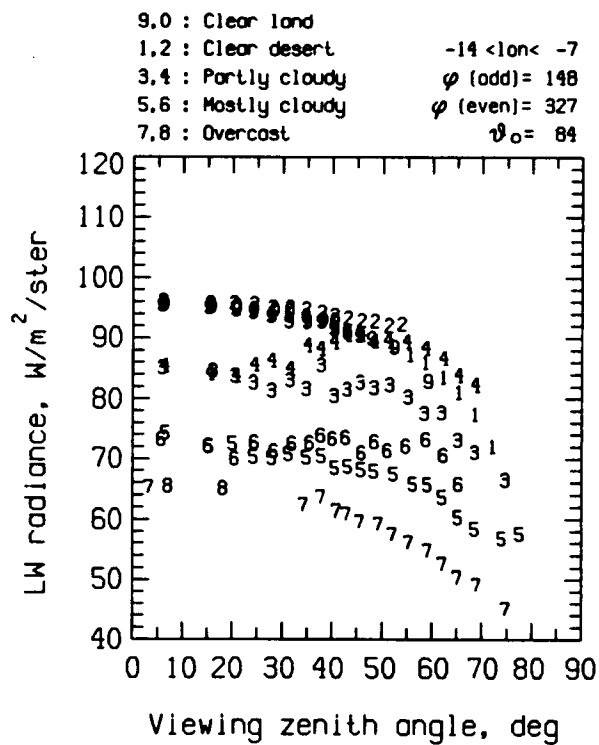


Figure 4.210 Sahel, Jan. 21.

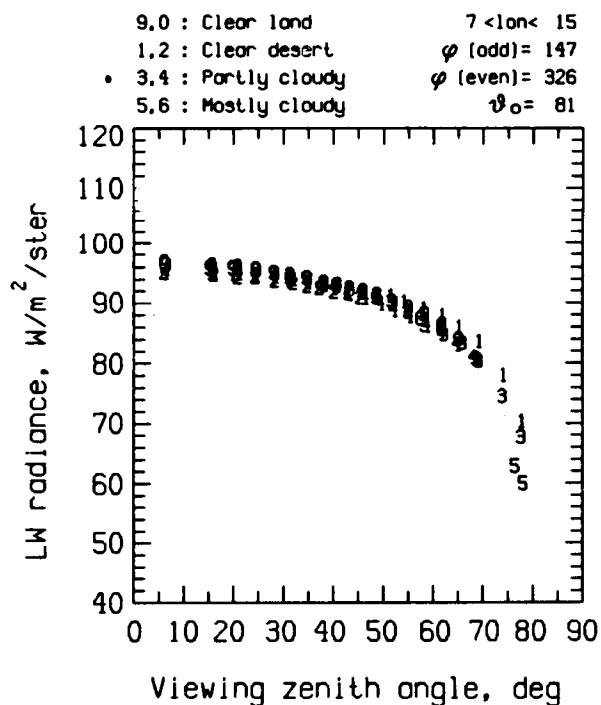


Figure 4.211 Sahel, Jan. 21.

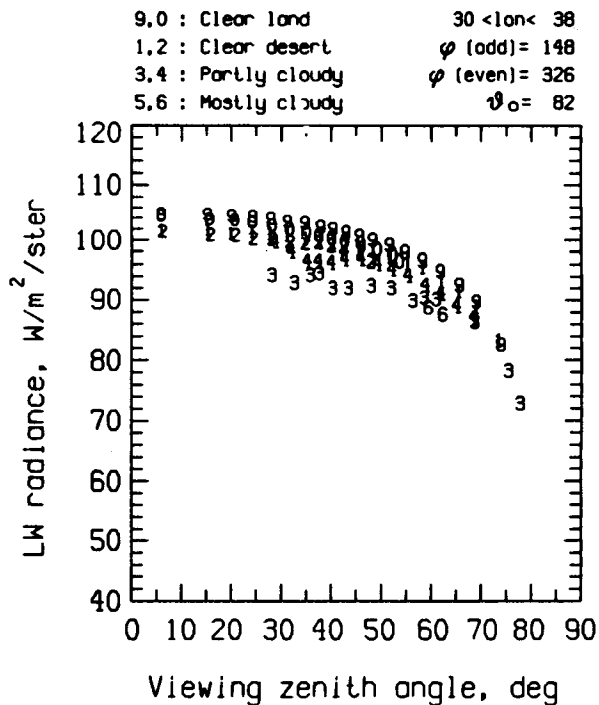


Figure 4.212 Sahel, Jan. 21.

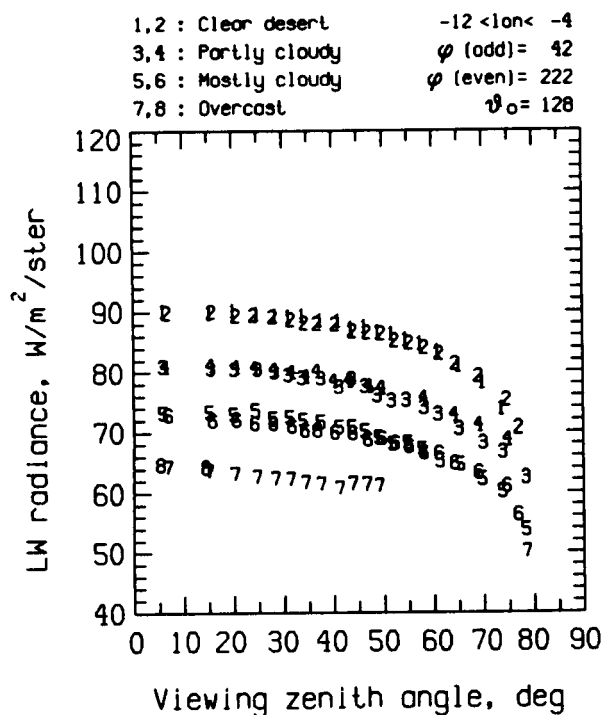


Figure 4.213 Sahel, Jan. 22.

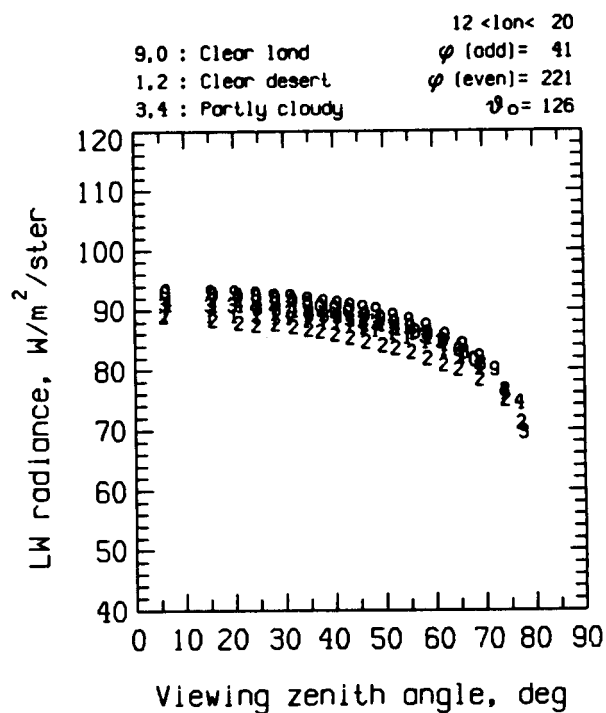


Figure 4.214 Sahel, Jan. 22.

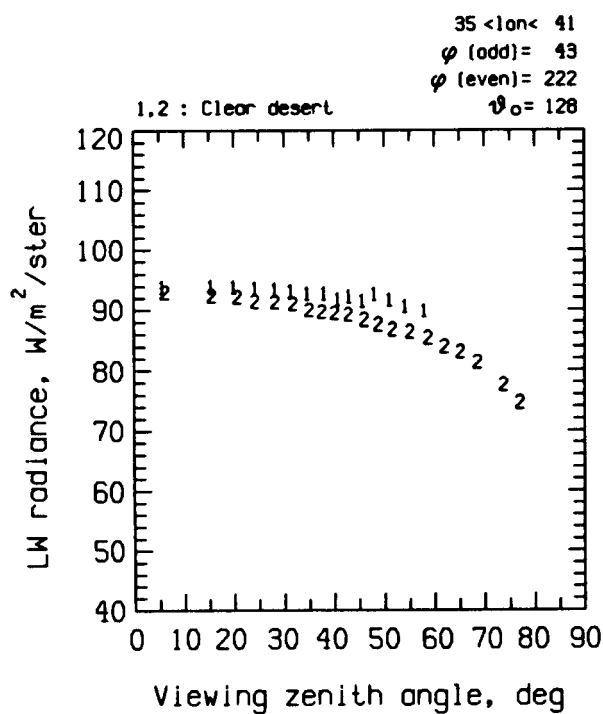


Figure 4.215 Sahel, Jan. 22.

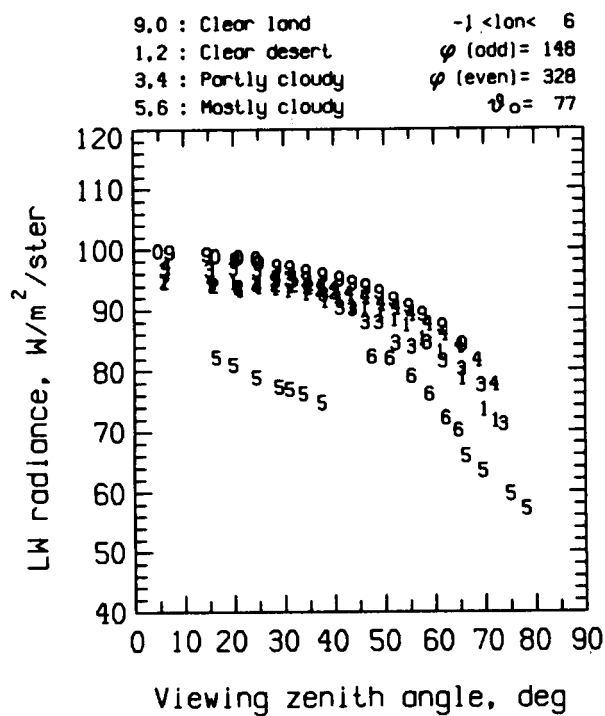


Figure 4.216 Sahel, Jan. 22.

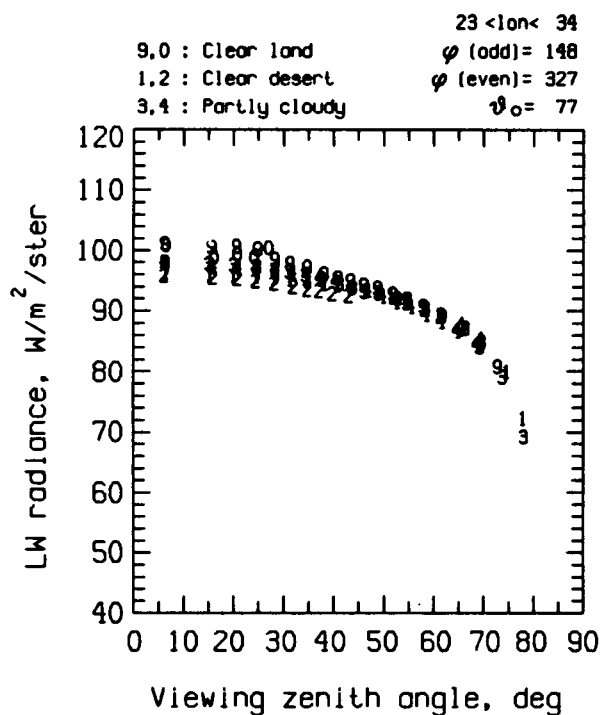


Figure 4.217 Sahel, Jan. 22.

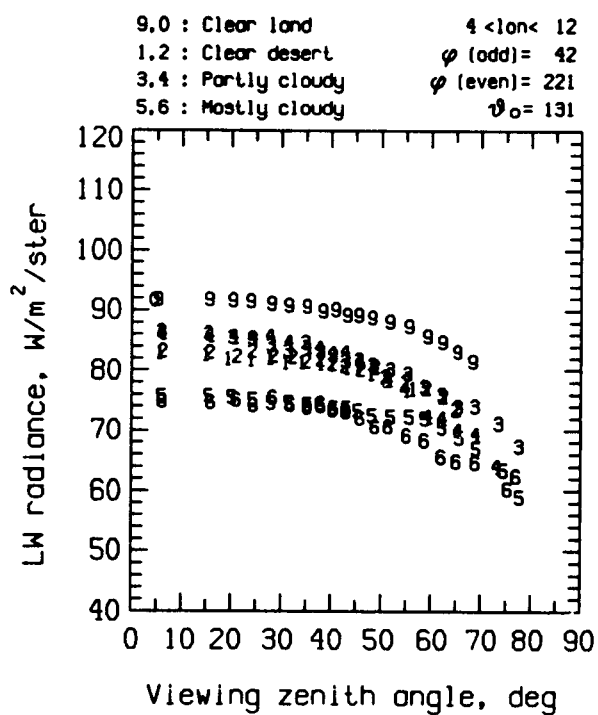


Figure 4.218 Sahel, Jan. 23.

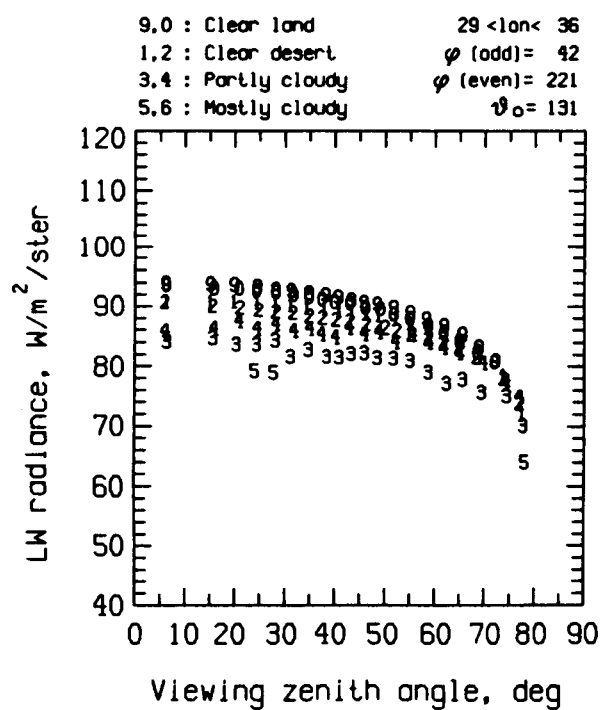


Figure 4.219 Sahel, Jan. 23.

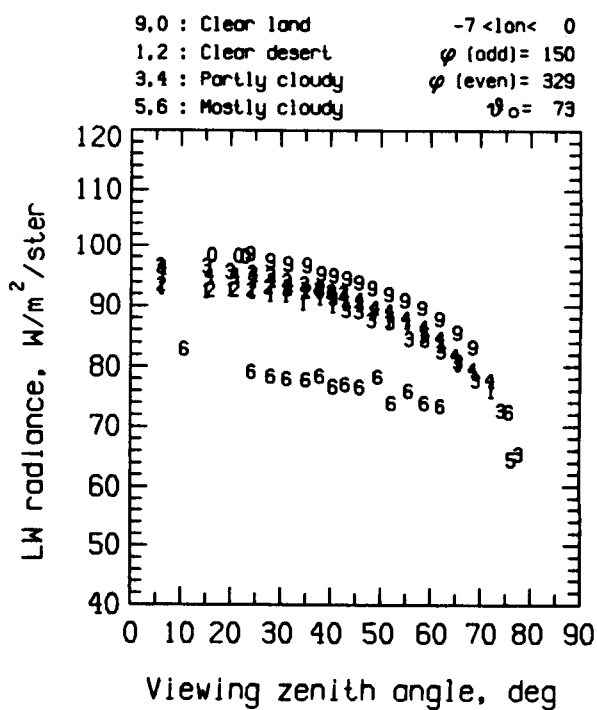


Figure 4.220 Sahel, Jan. 23.

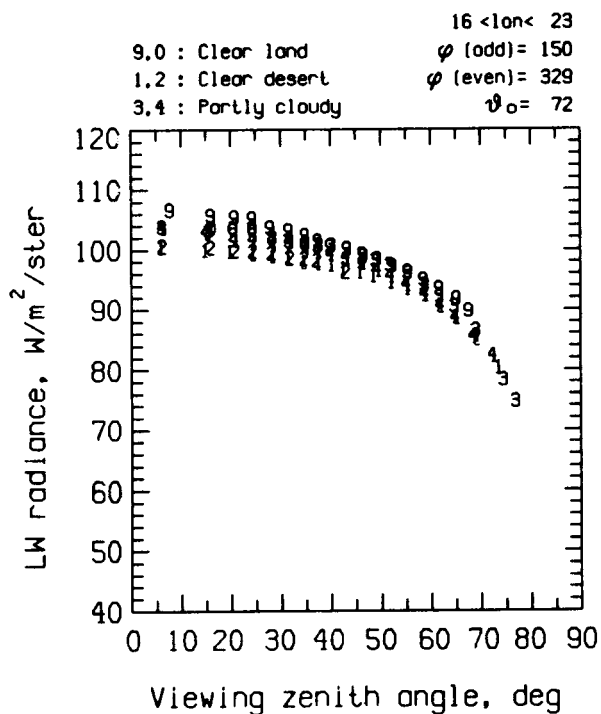


Figure 4.221 Sahel, Jan. 23.

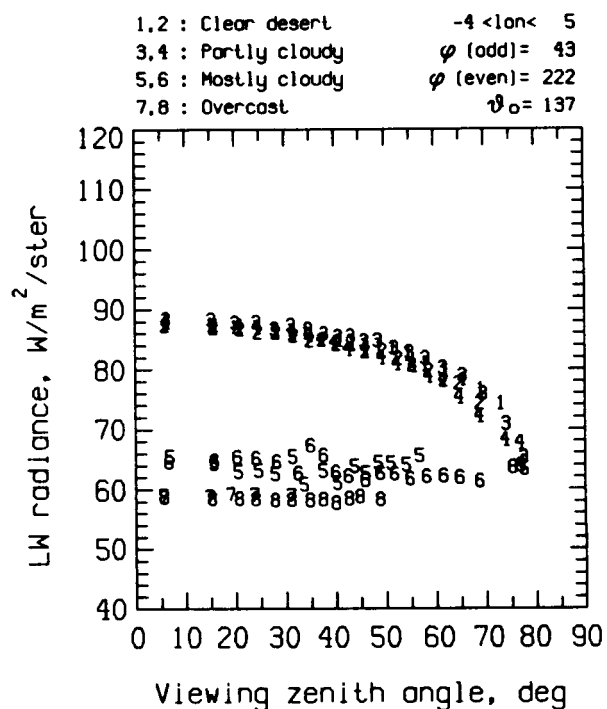


Figure 4.222 Sahel, Jan. 24.

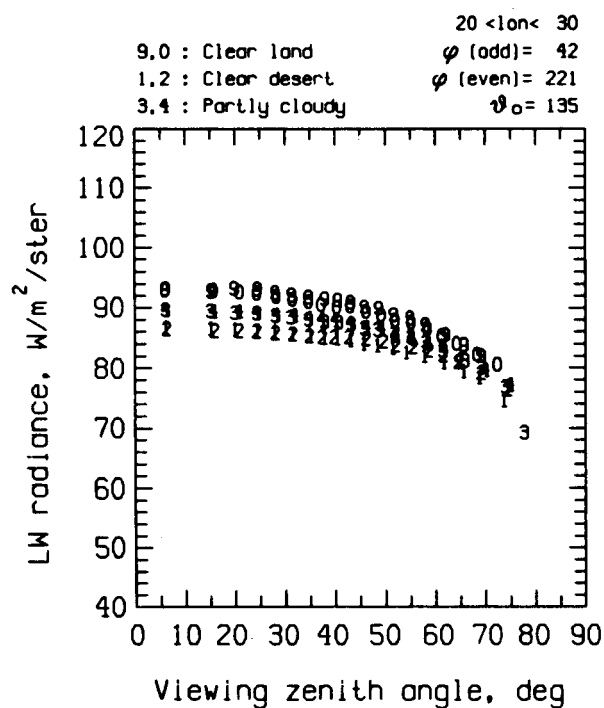


Figure 4.223 Sahel, Jan. 24.

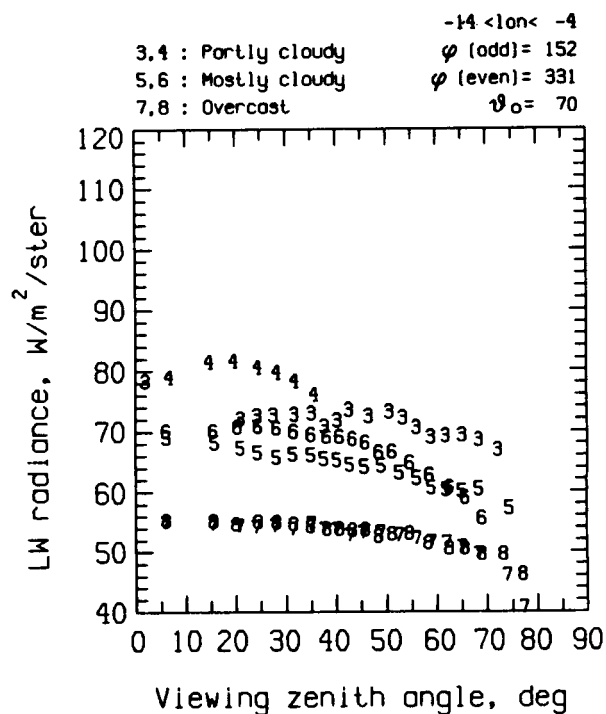


Figure 4.224 Sahel, Jan. 24.

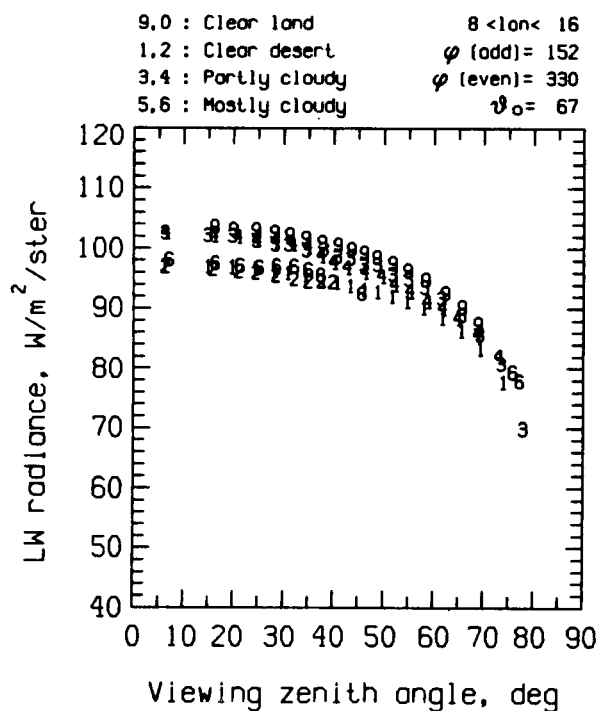


Figure 4.225 Sahel, Jan. 24.

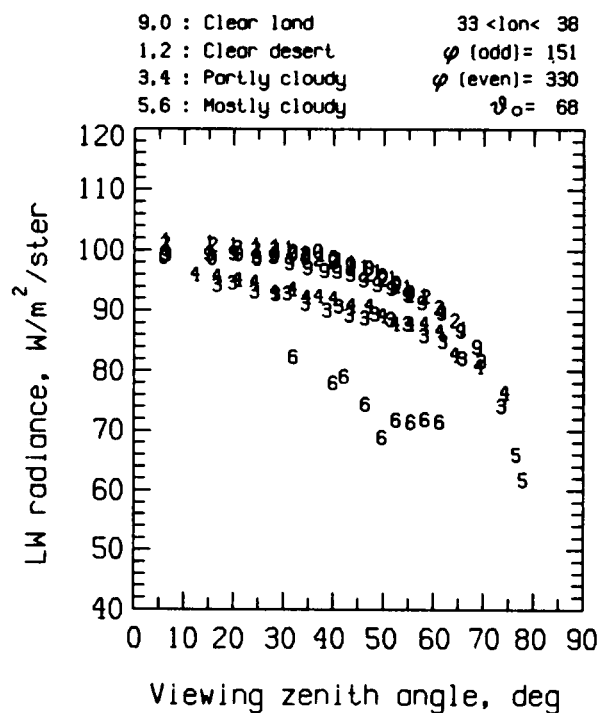


Figure 4.226 Sahel, Jan. 24.

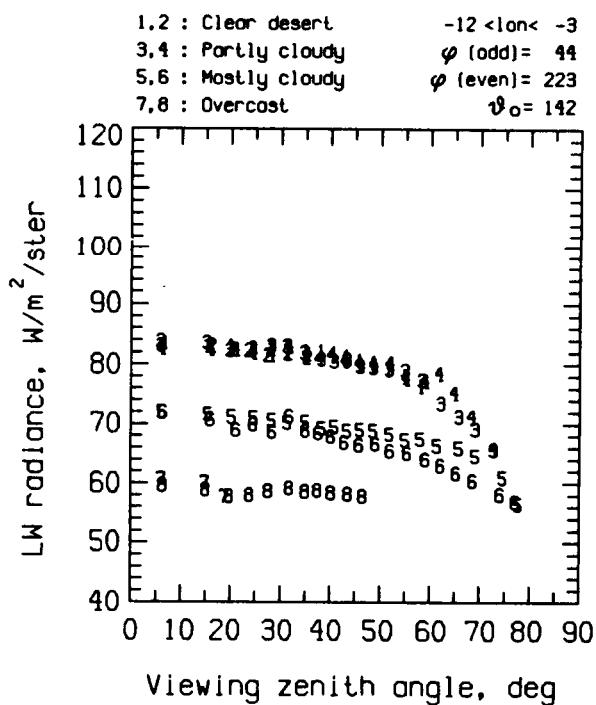


Figure 4.227 Sahel, Jan. 25.

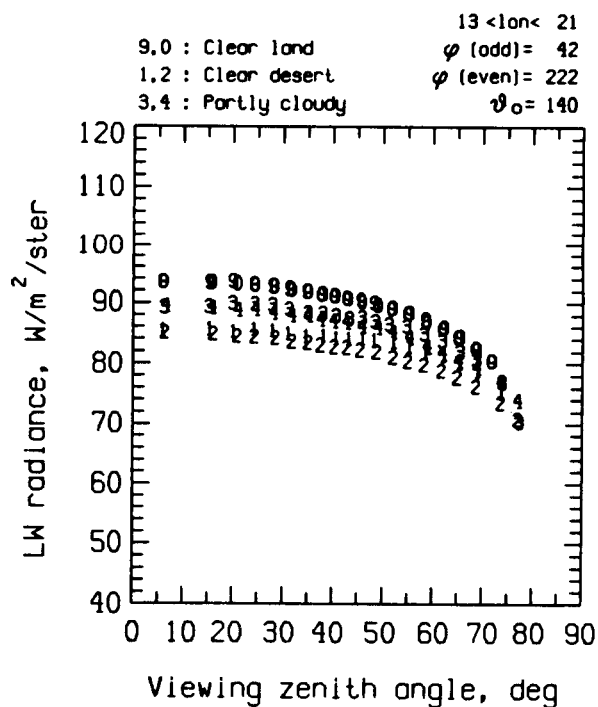


Figure 4.228 Sahel, Jan. 25.

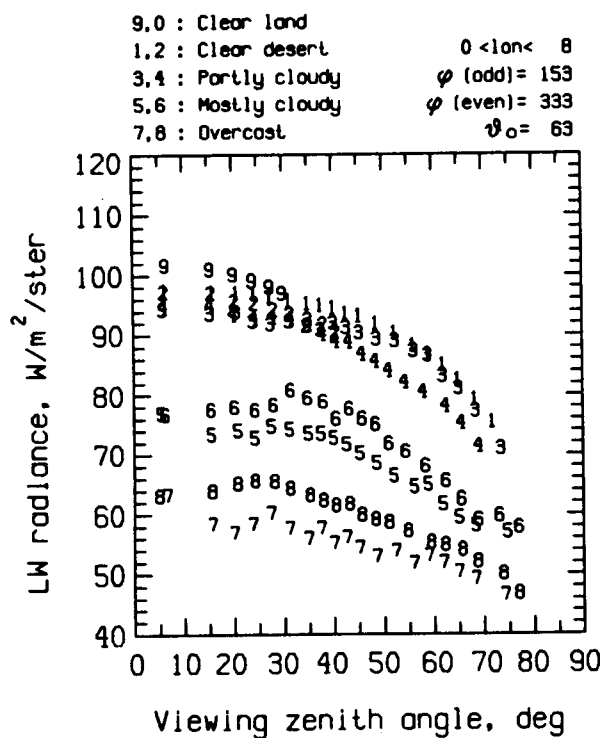


Figure 4.229 Sahel, Jan. 25.

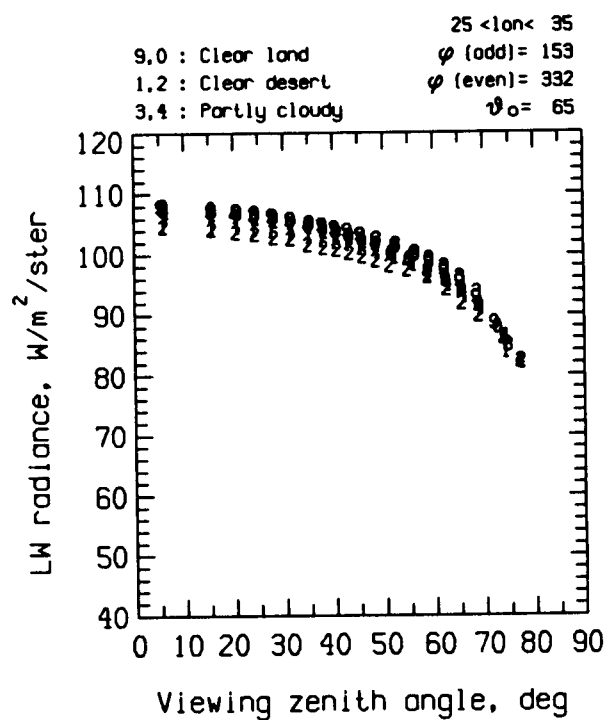


Figure 4.230 Sahel, Jan. 25.

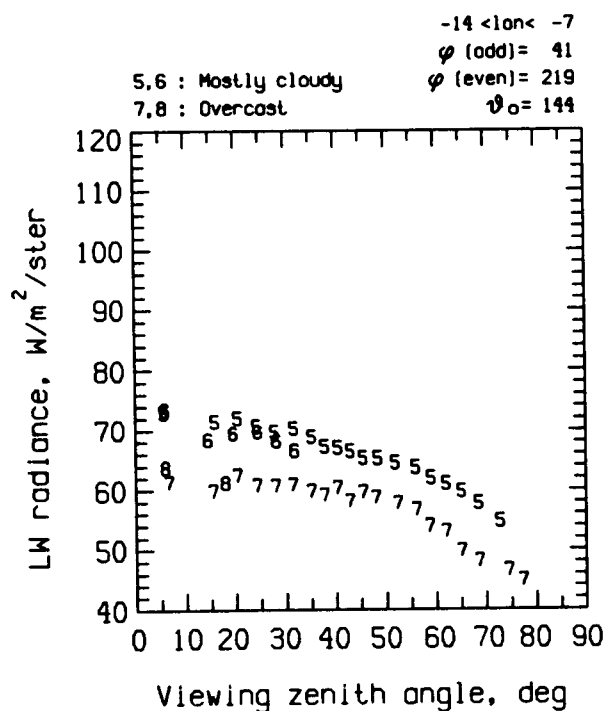


Figure 4.231 Sahel, Jan. 26.

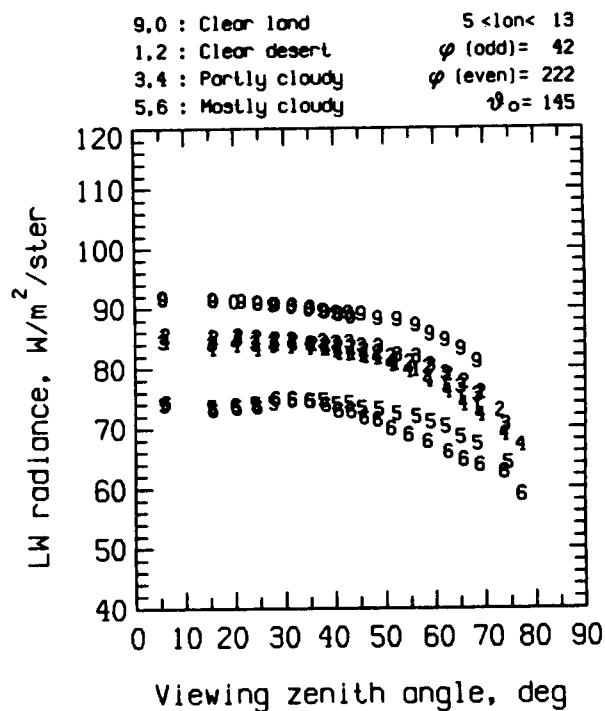


Figure 4.232 Sahel, Jan. 26.

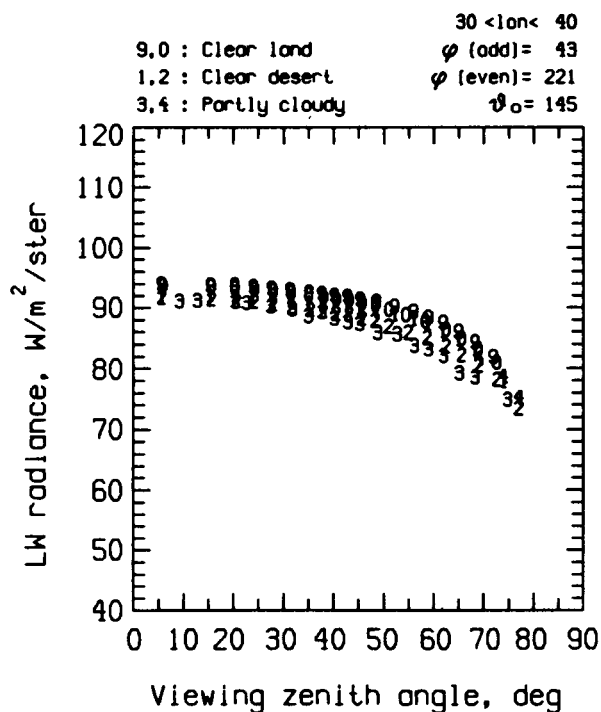


Figure 4.233 Sahel, Jan. 26.

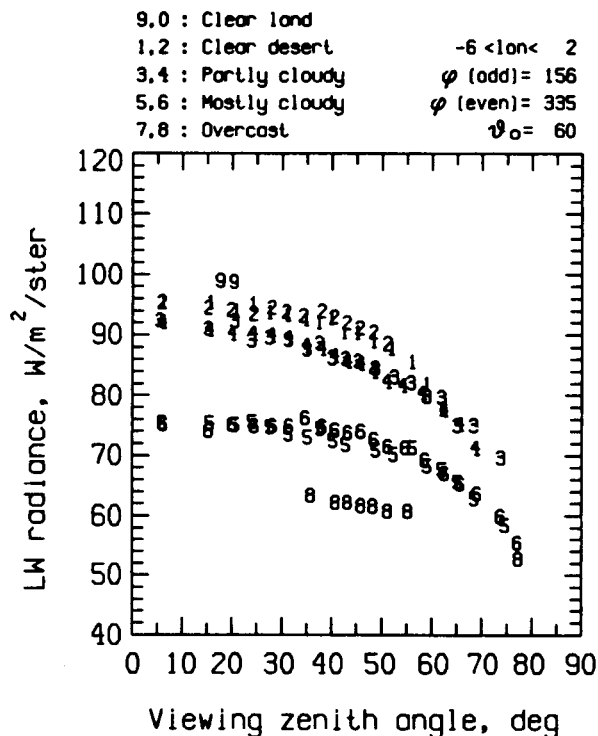


Figure 4.234 Sahel, Jan. 26.

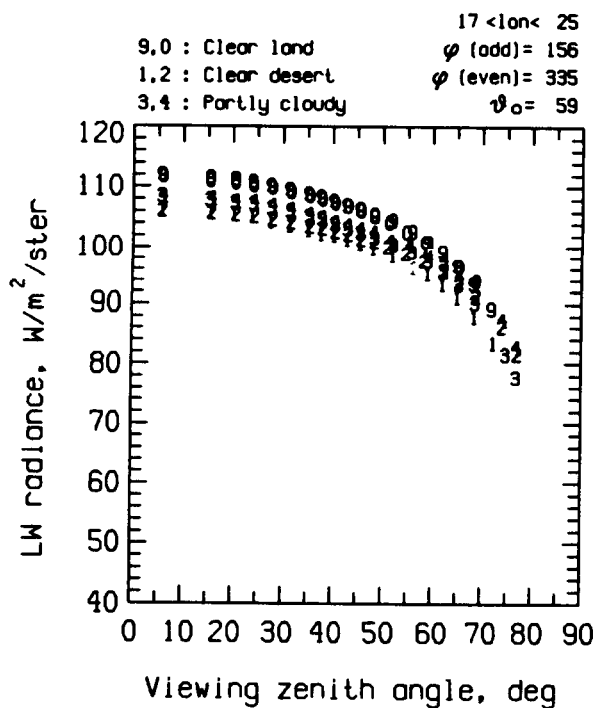


Figure 4.235 Sahel, Jan. 26.

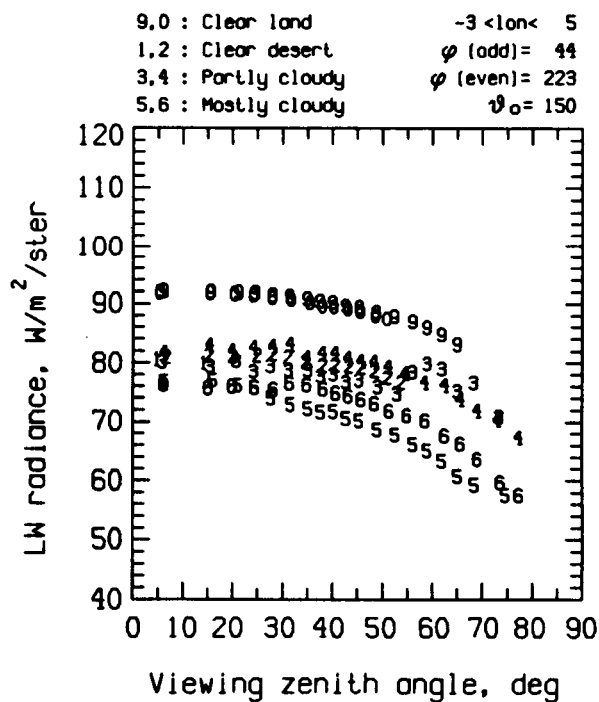


Figure 4.236 Sahel, Jan. 27.

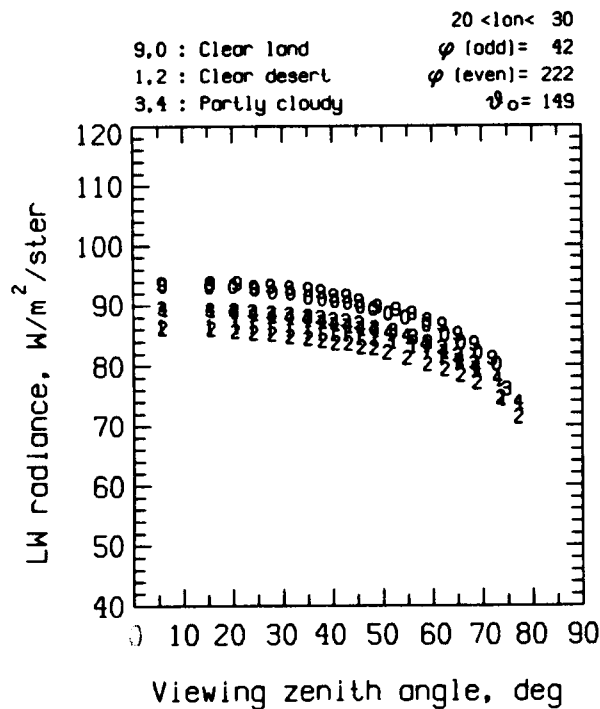


Figure 4.237 Sahel, Jan. 27.

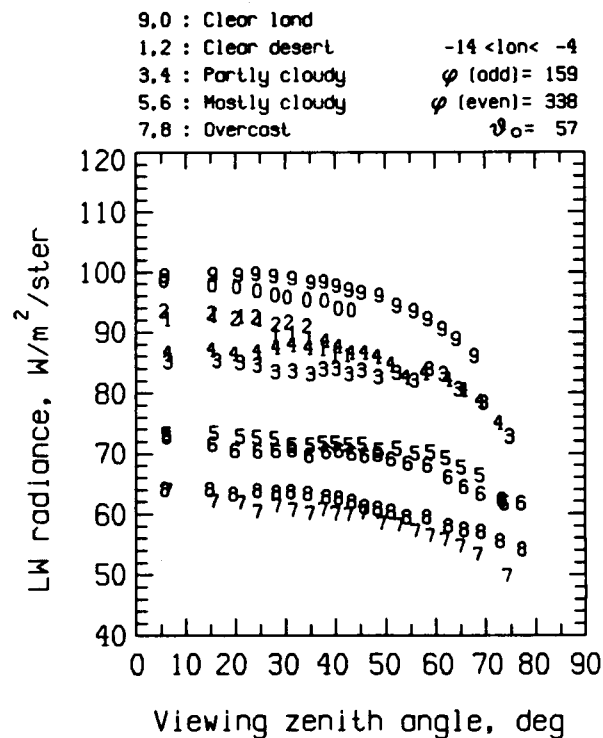


Figure 4.238 Sahel, Jan. 27.

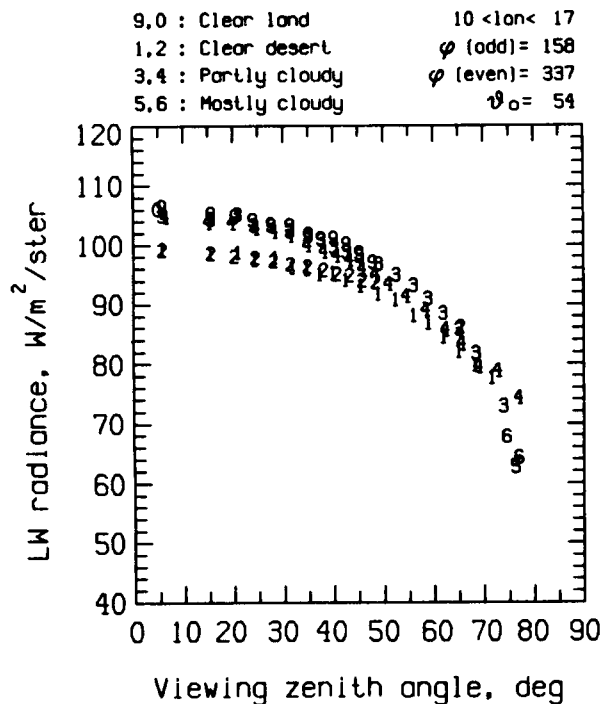


Figure 4.239 Sahel, Jan. 27.

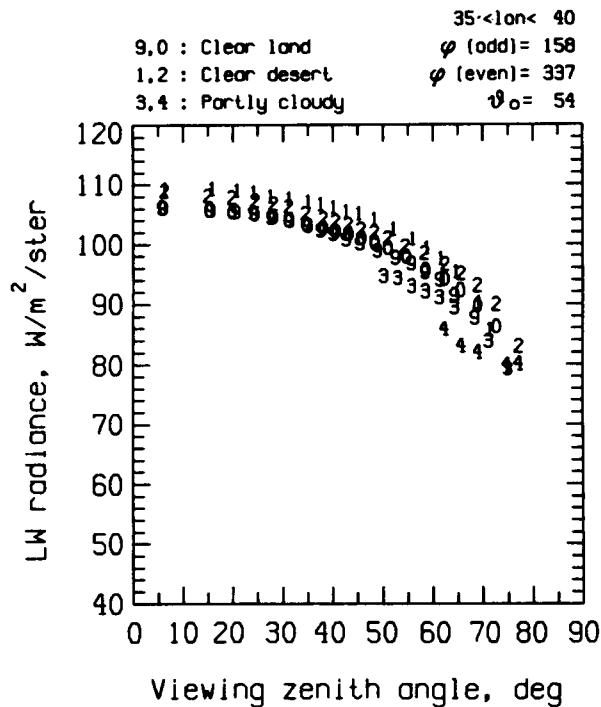


Figure 4.240 Sahel, Jan. 27.

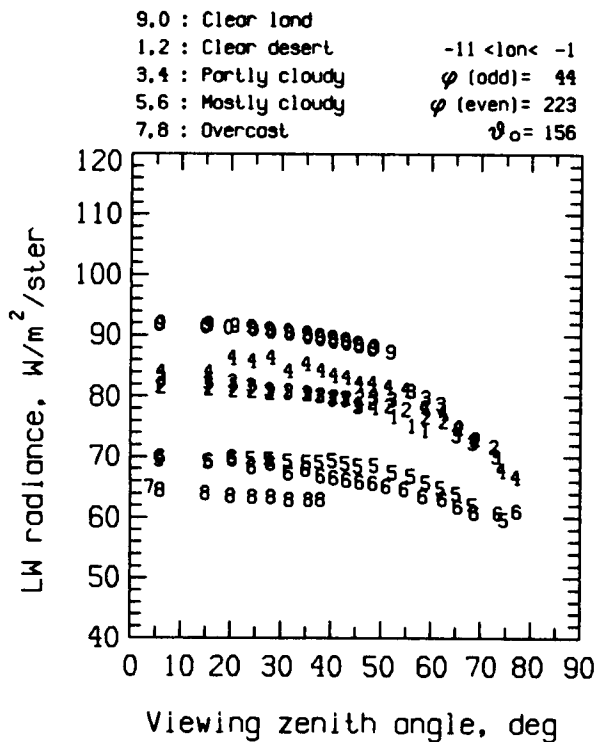


Figure 4.241 Sahel, Jan. 28.

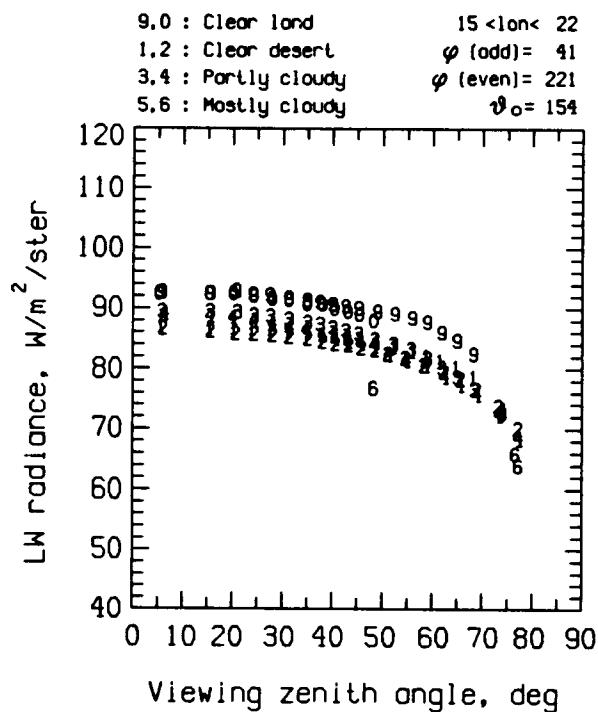


Figure 4.242 Sahel, Jan. 28.

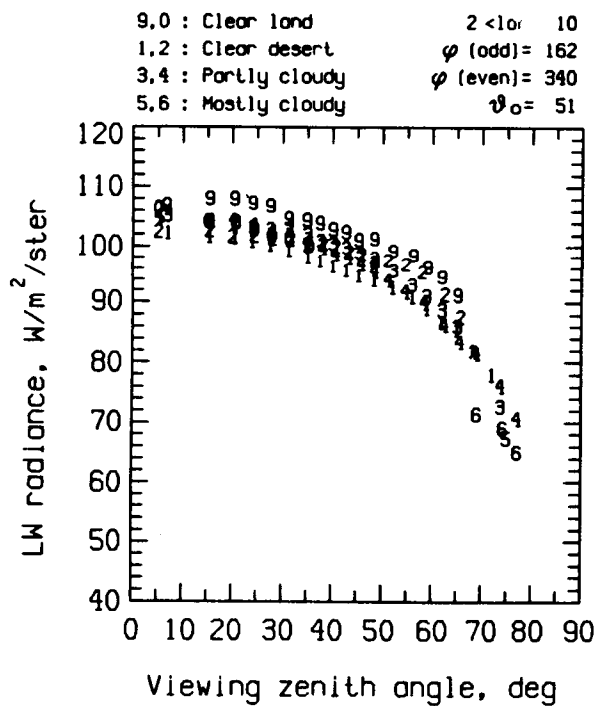


Figure 4.243 Sahel, Jan. 28.

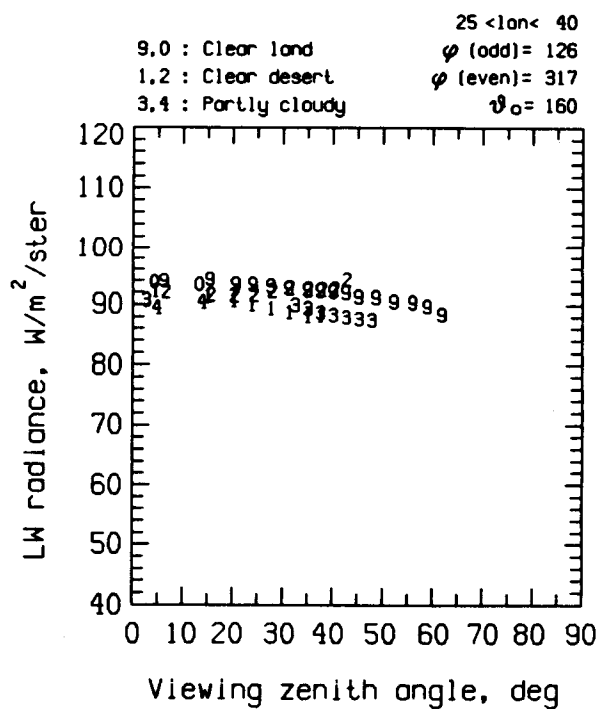


Figure 4.244 Sahel, Jan. 28.

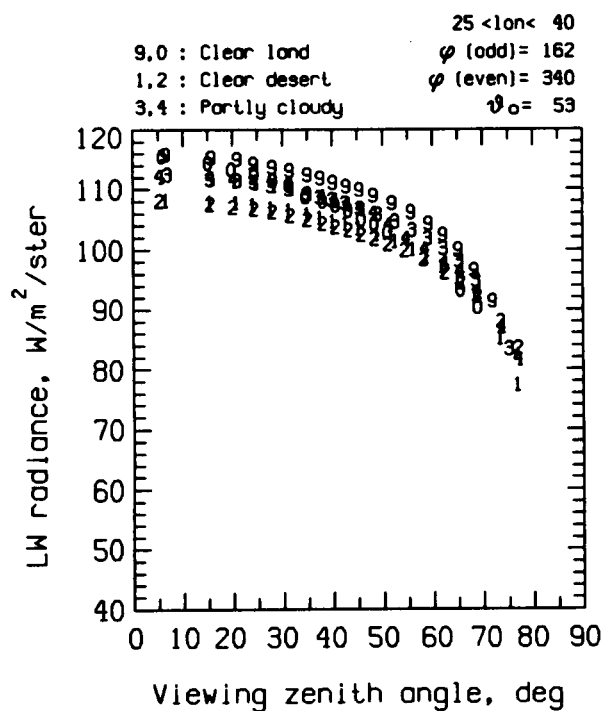


Figure 4.245 Sahel, Jan. 28.

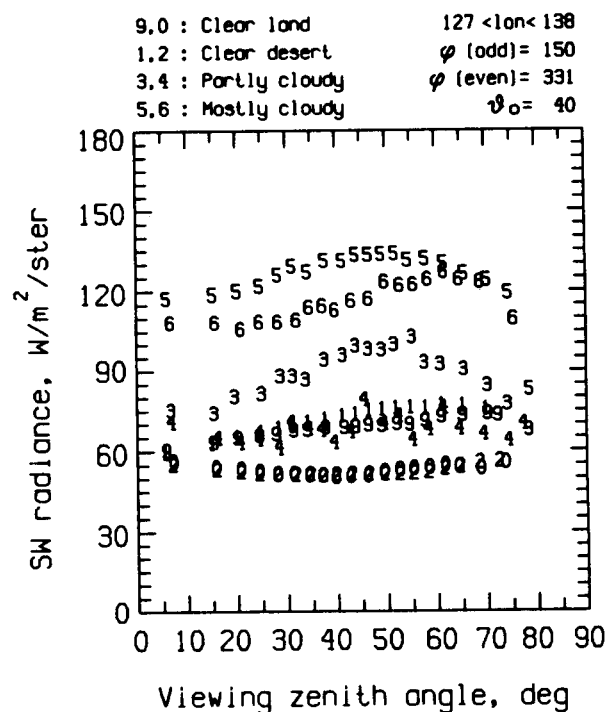


Figure 4.246 Australia, Aug. 8.

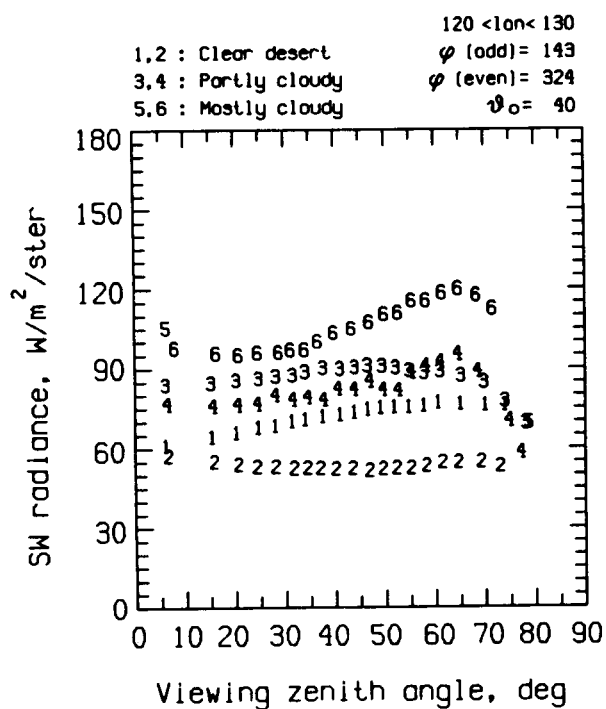


Figure 4.247 Australia, Aug. 9.

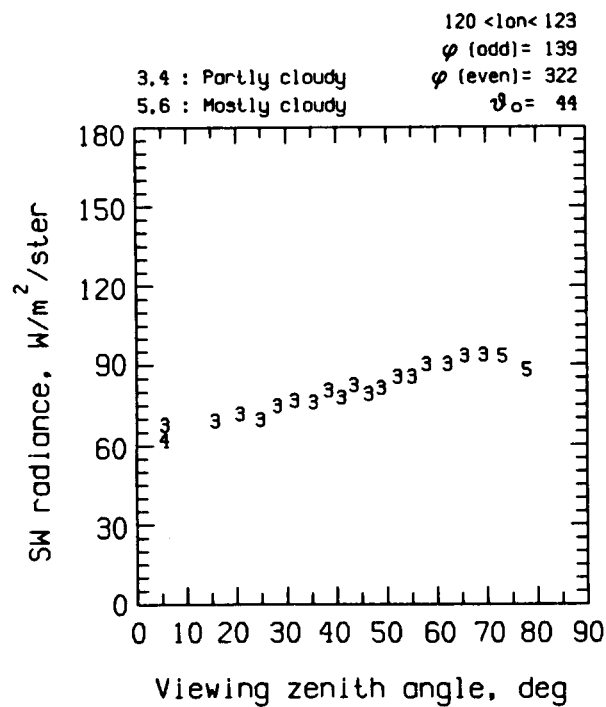


Figure 4.248 Australia, Aug. 10.

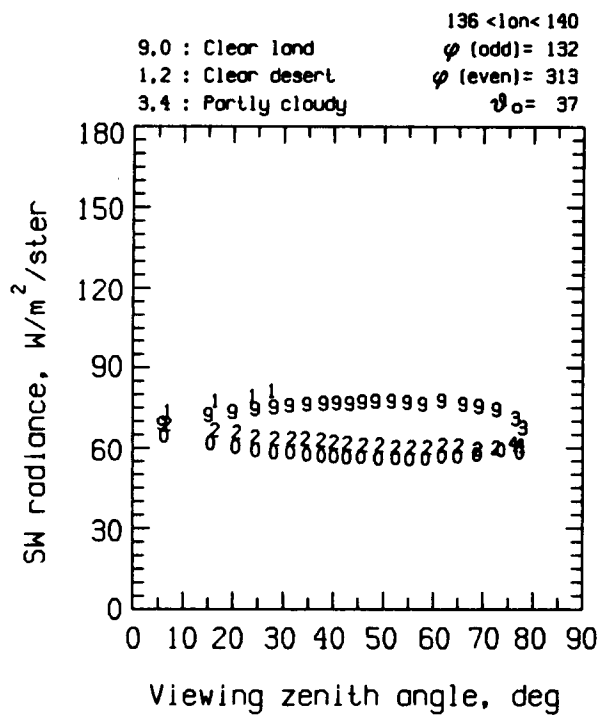


Figure 4.249 Australia, Aug. 10.

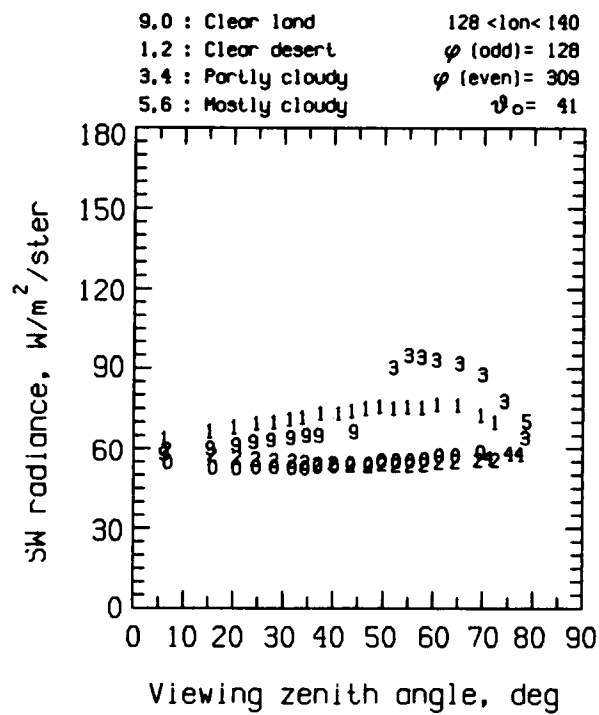


Figure 4.250 Australia, Aug. 11.

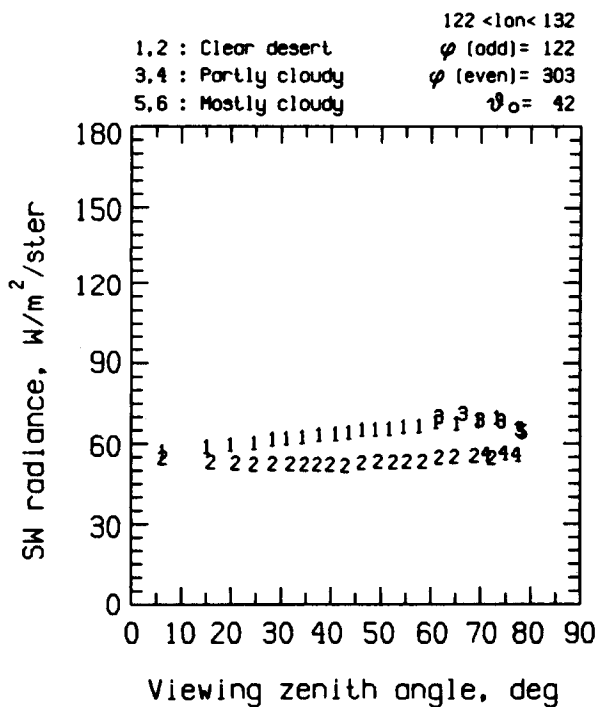


Figure 4.251 Australia, Aug. 12.

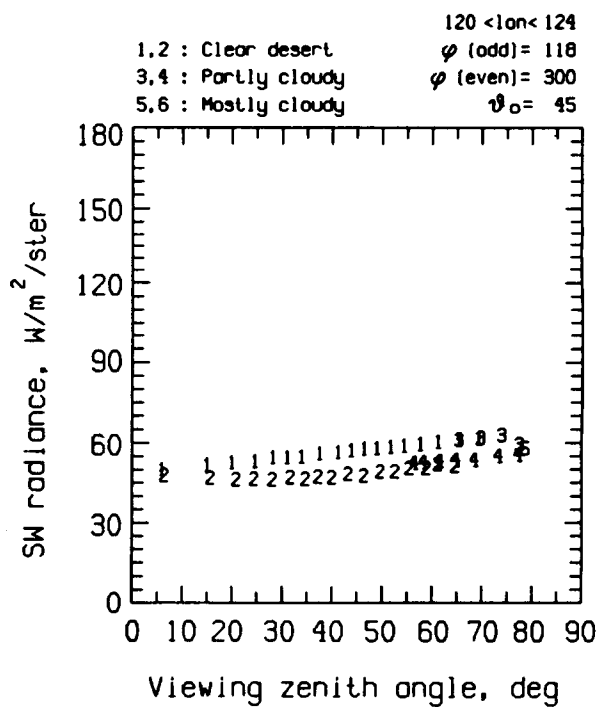


Figure 4.252 Australia, Aug. 13.

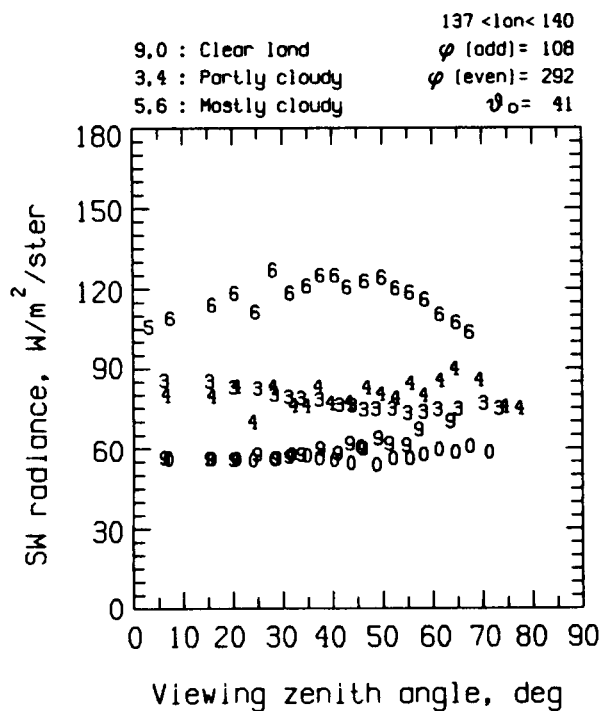


Figure 4.253 Australia, Aug. 13.

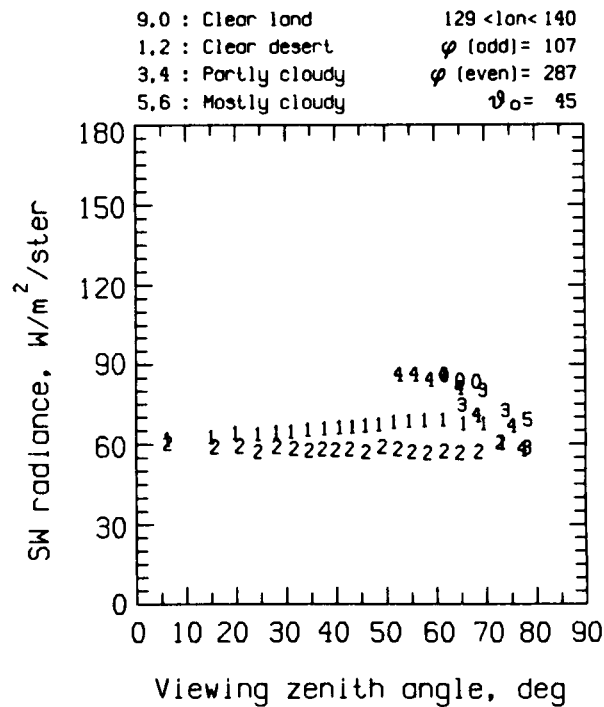


Figure 4.254 Australia, Aug. 14.

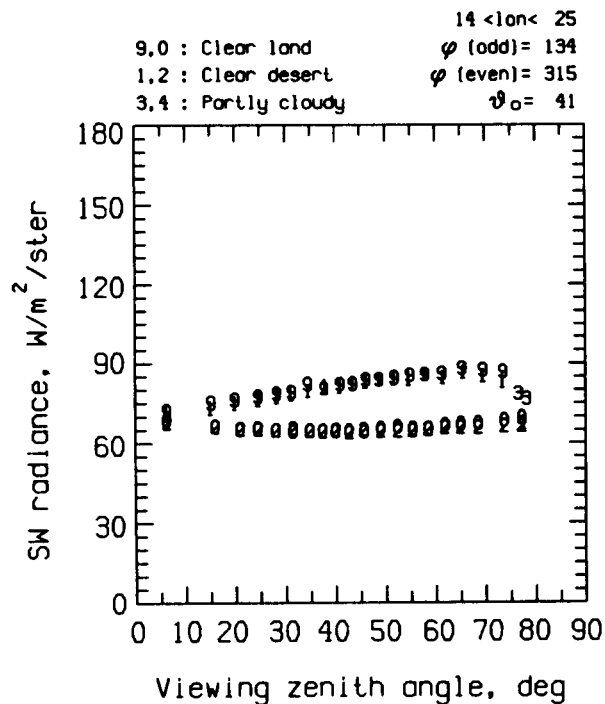


Figure 4.255 Kalahari, Aug. 10.

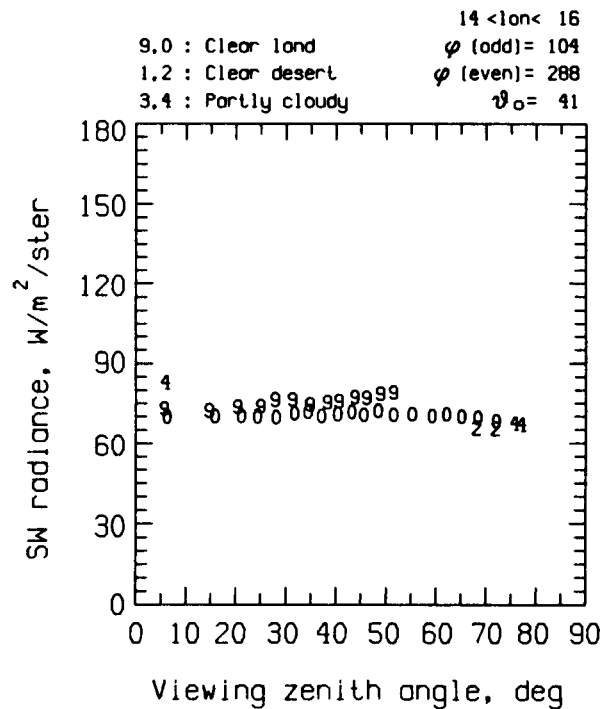


Figure 4.256 Kalahari, Aug. 13.

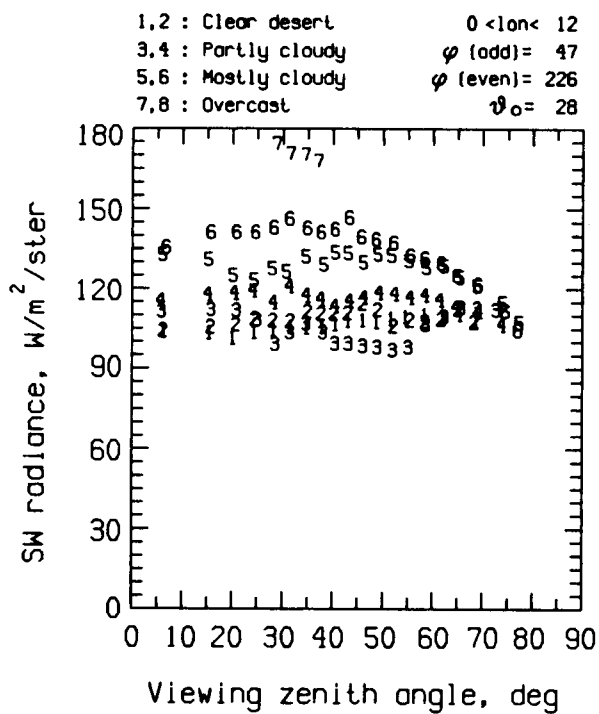


Figure 4.257 Sahara, Aug. 8.

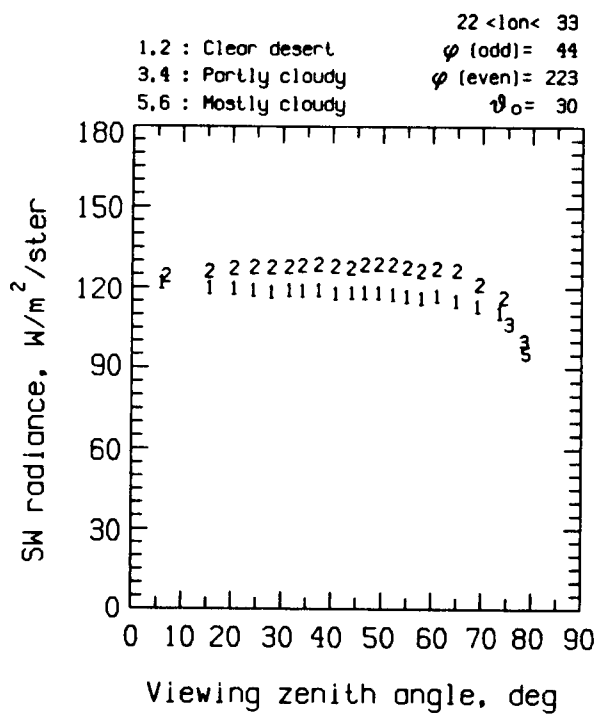


Figure 4.258 Sahara, Aug. 8.

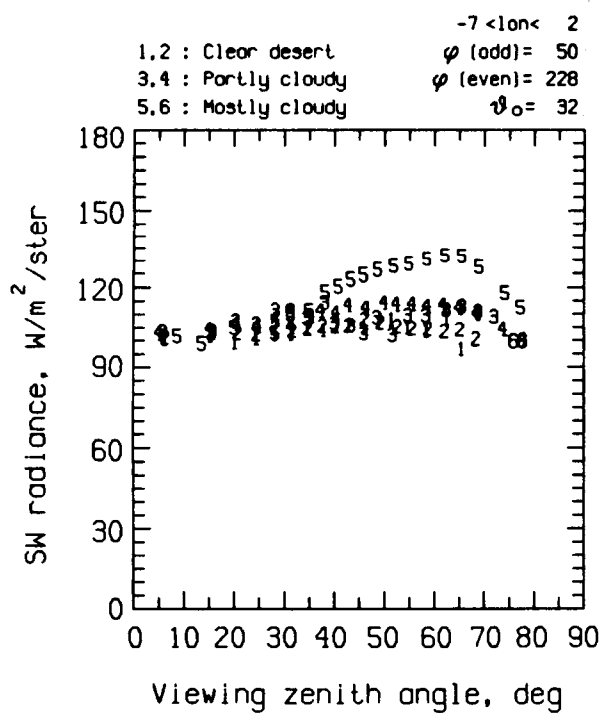


Figure 4.259 Sahara, Aug. 9.

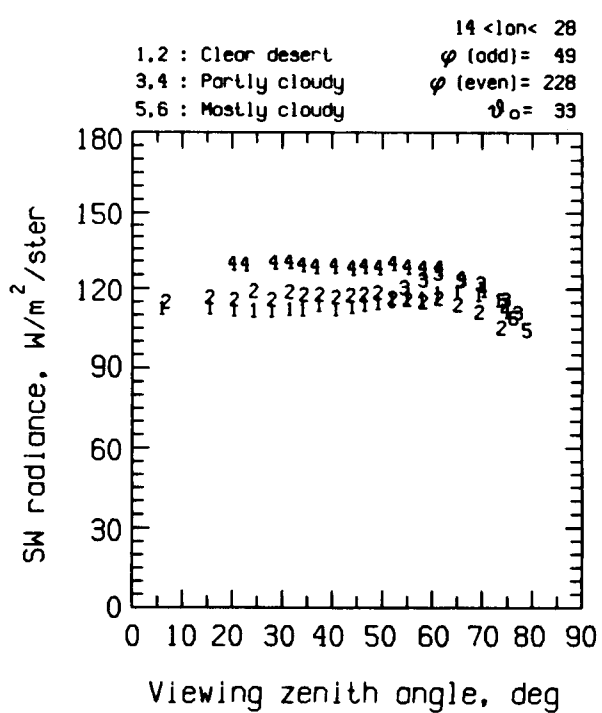


Figure 4.260 Sahara, Aug. 9.

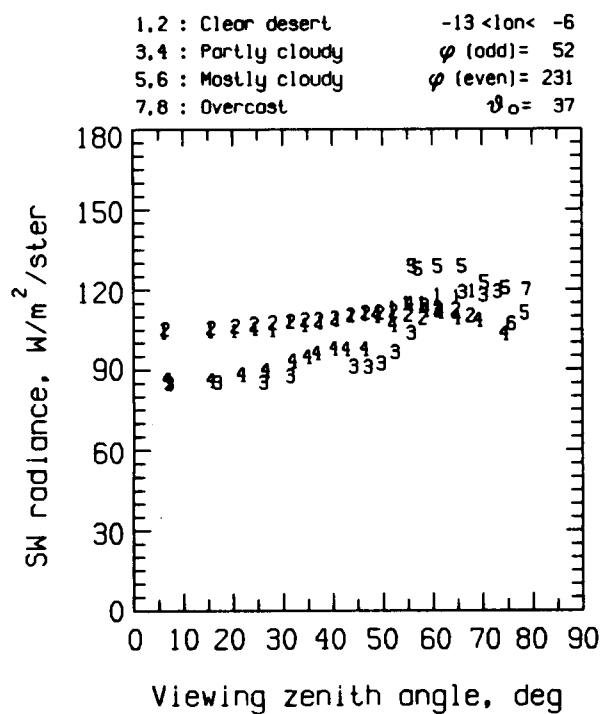


Figure 4.261 Sahara, Aug. 10.

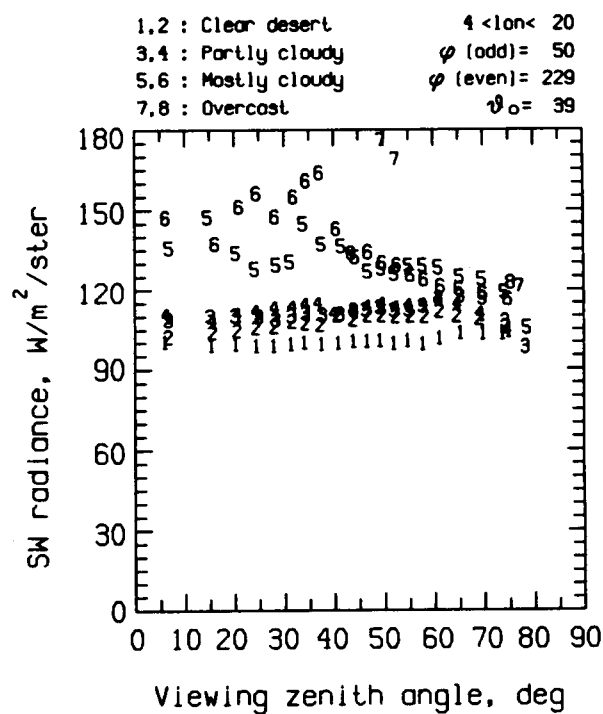


Figure 4.262 Sahara, Aug. 10.

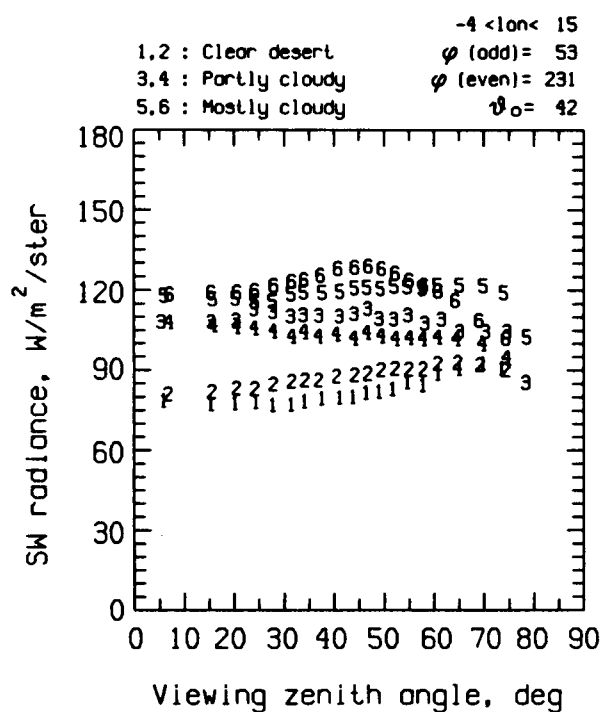


Figure 4.263 Sahara, Aug. 11.

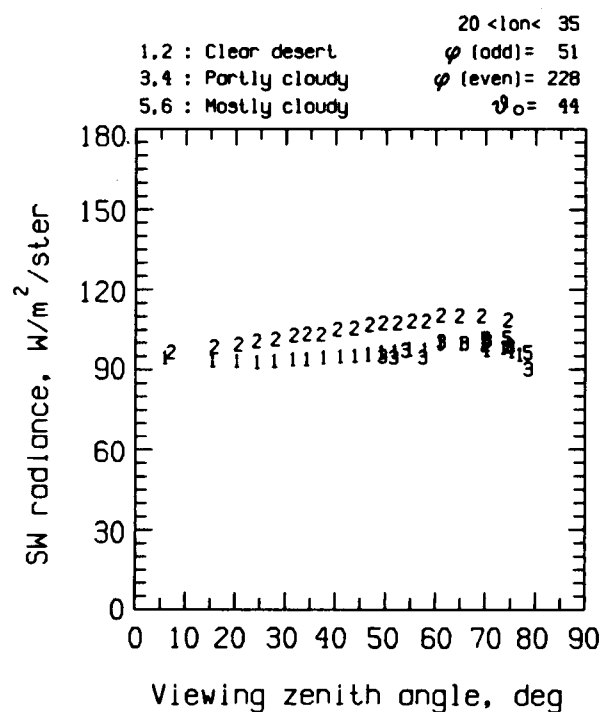


Figure 4.264 Sahara, Aug. 11.

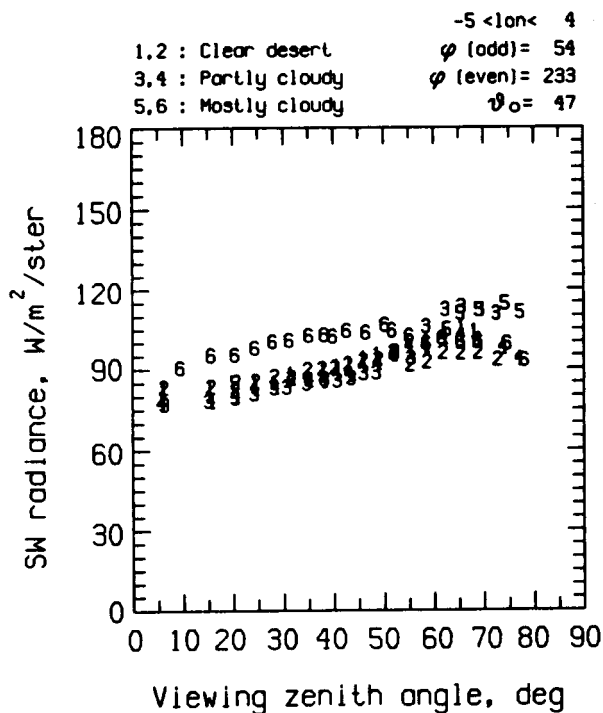


Figure 4.265 Sahara, Aug. 12.

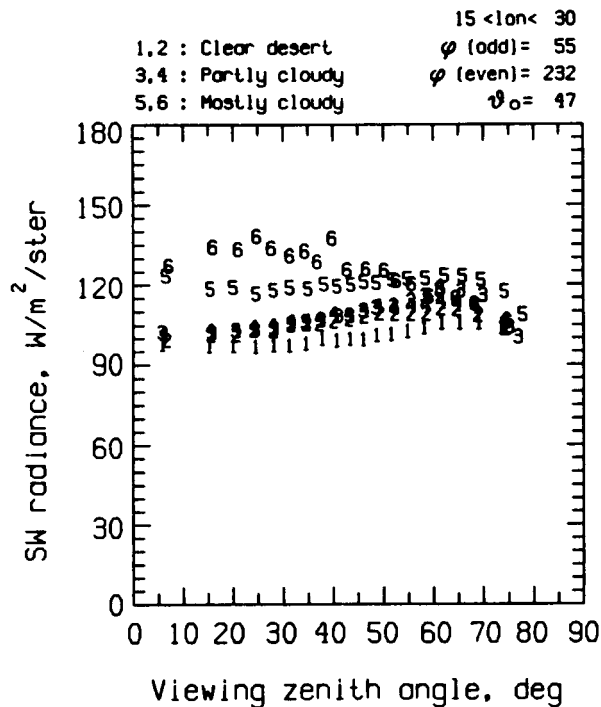


Figure 4.266 Sahara, Aug. 12.

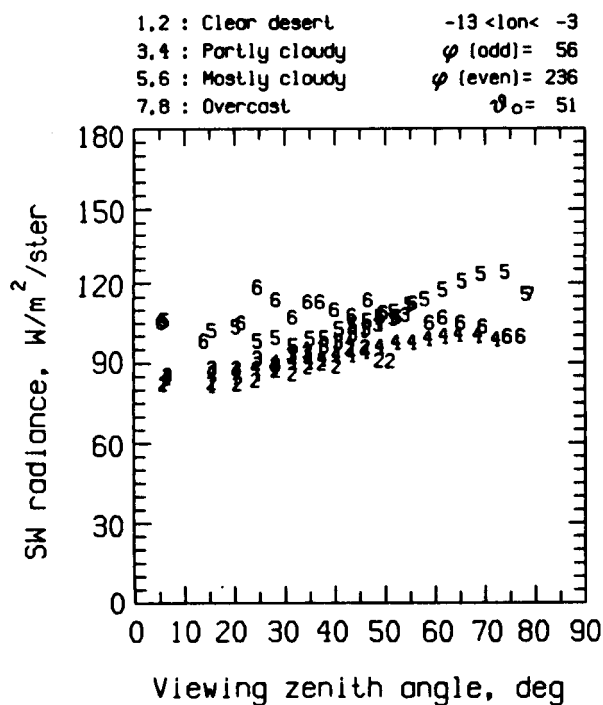


Figure 4.267 Sahara, Aug. 13.

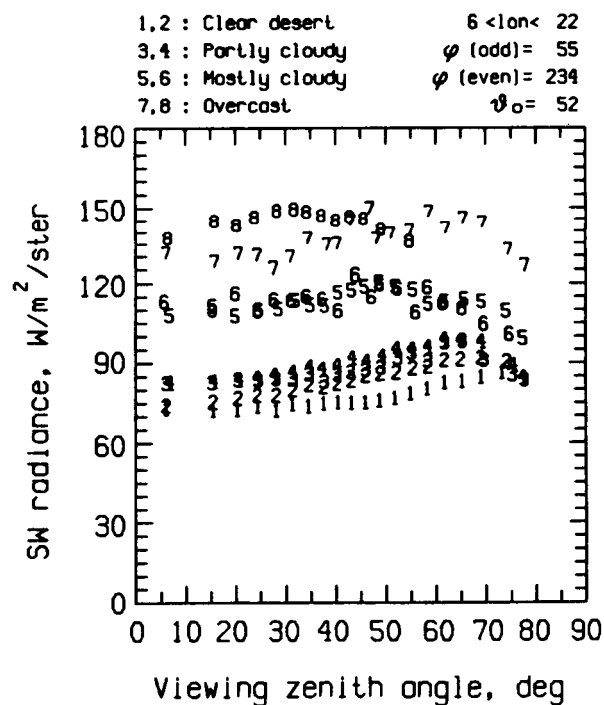


Figure 4.268 Sahara, Aug. 13.

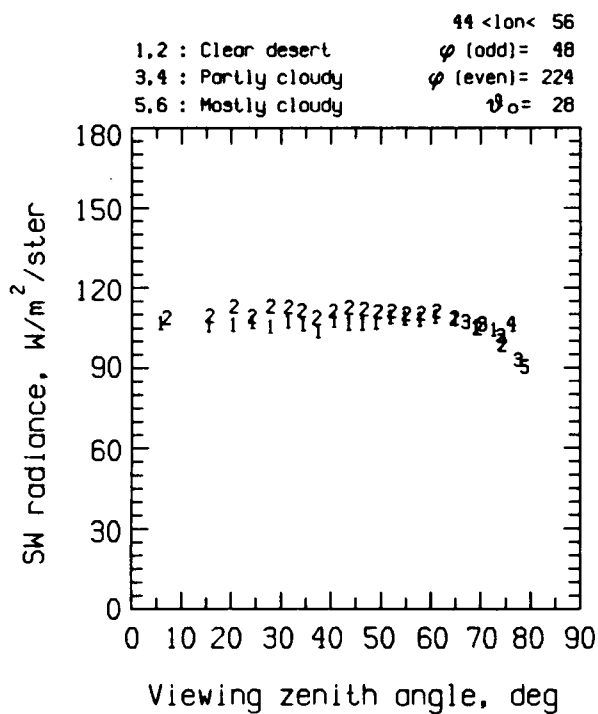


Figure 4.269 Arabian peninsula, Aug. 8.

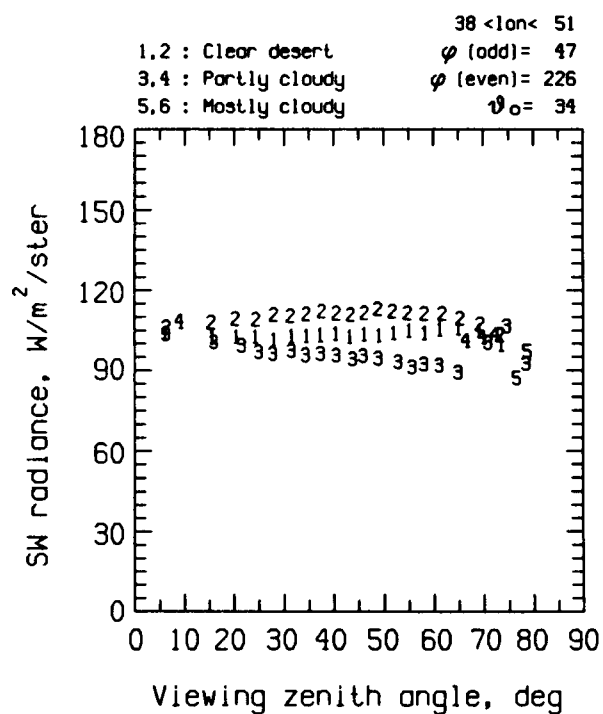


Figure 4.270 Arabian peninsula, Aug. 9.

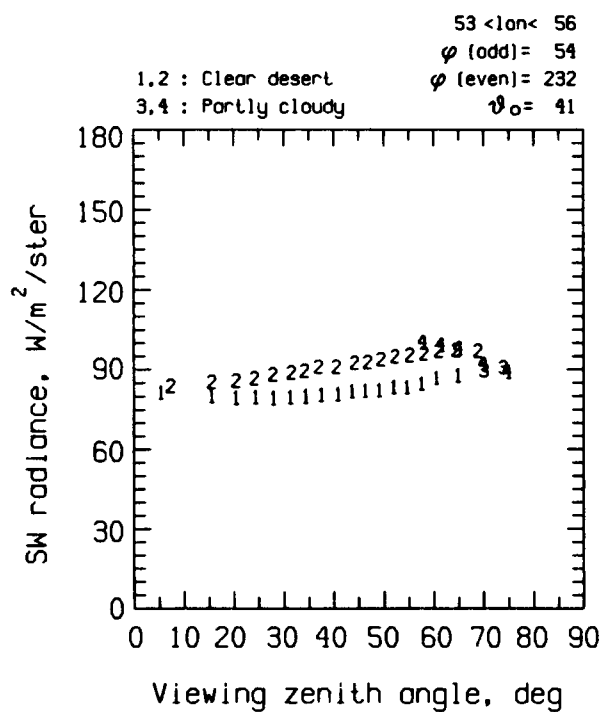


Figure 4.271 Arabian peninsula, Aug. 11.

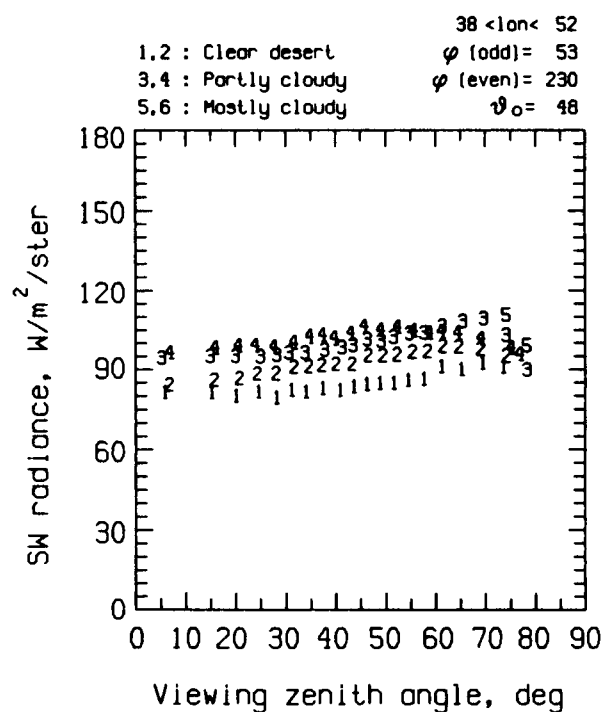


Figure 4.272 Arabian peninsula, Aug. 12.

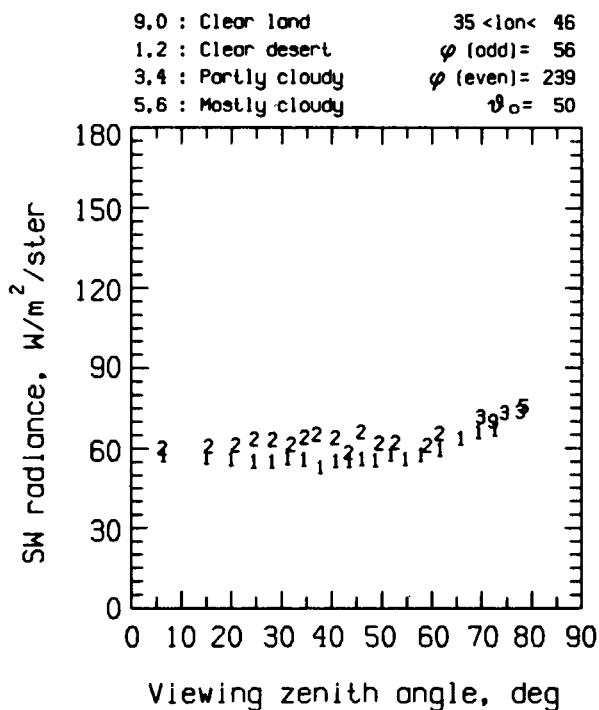


Figure 4.273 Arabian peninsula, Aug. 13.

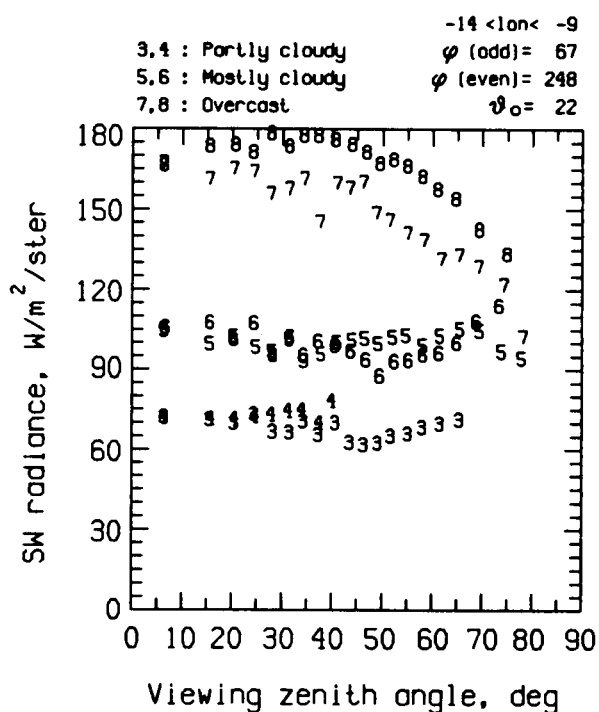


Figure 4.274 Sahel, Aug. 8.

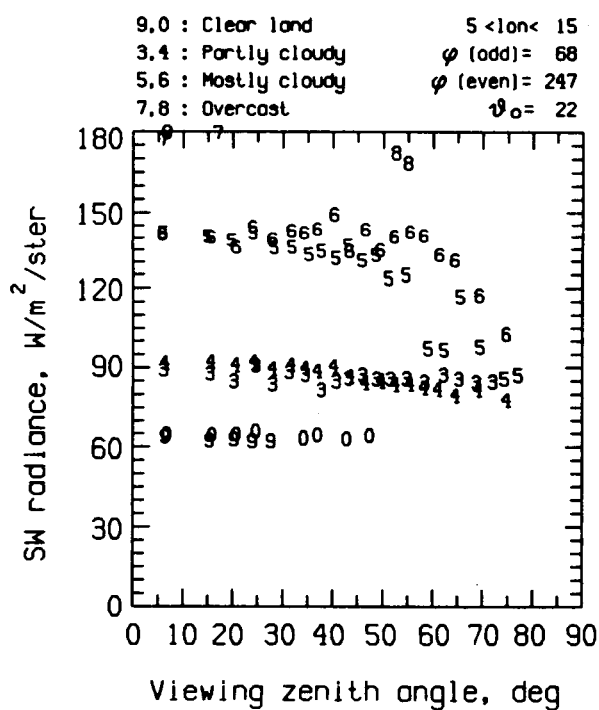


Figure 4.275 Sahel, Aug. 8.

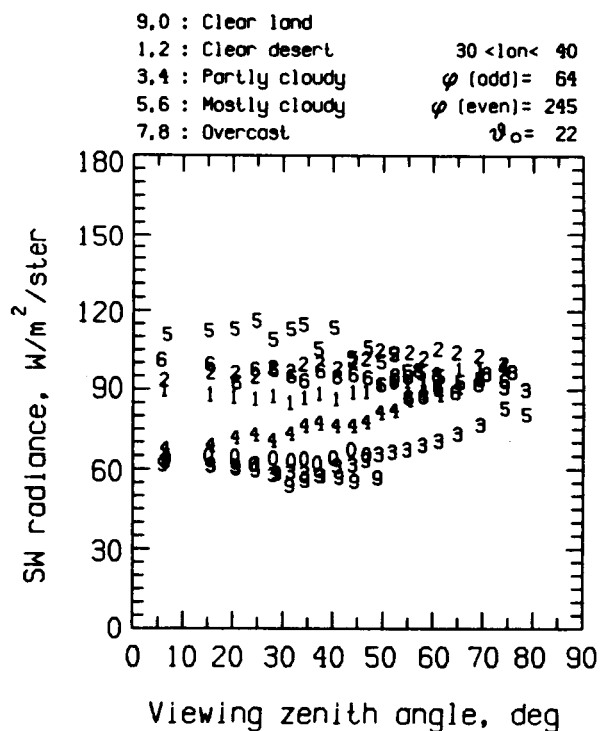


Figure 4.276 Sahel, Aug. 8.

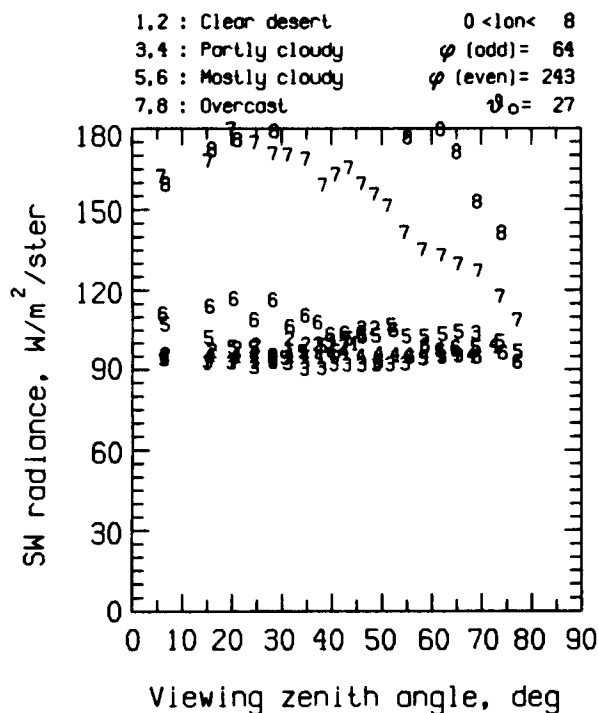


Figure 4.277 Sahel, Aug. 9.

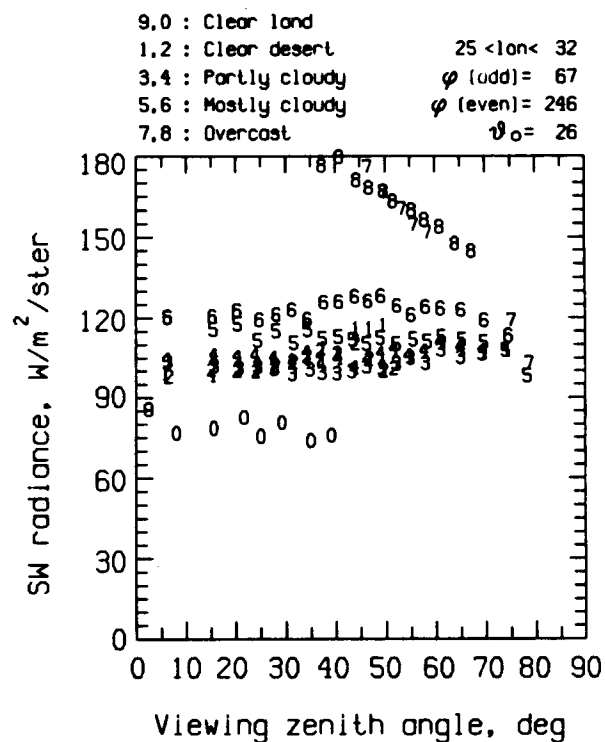


Figure 4.278 Sahel, Aug. 9.

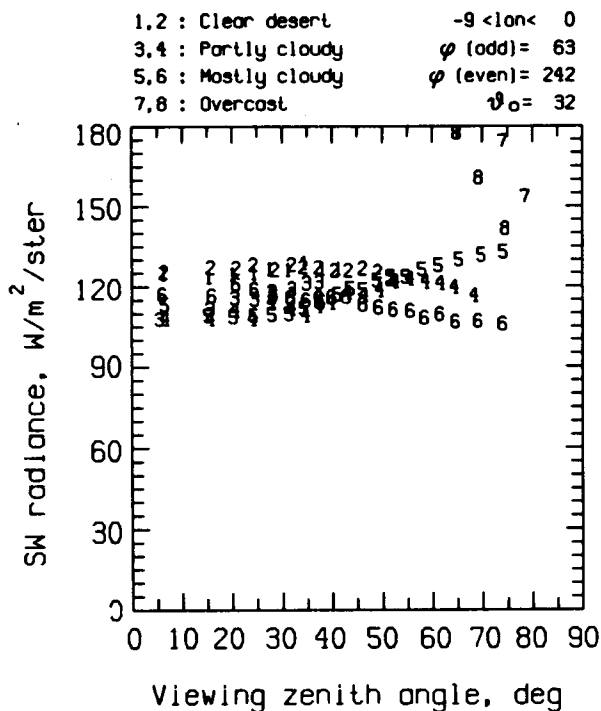


Figure 4.279 Sahel, Aug. 10.

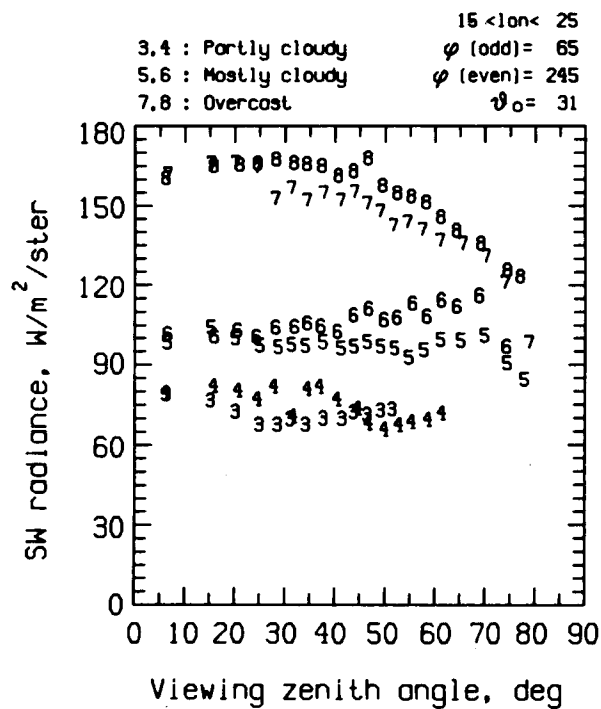


Figure 4.280 Sahel, Aug. 10.

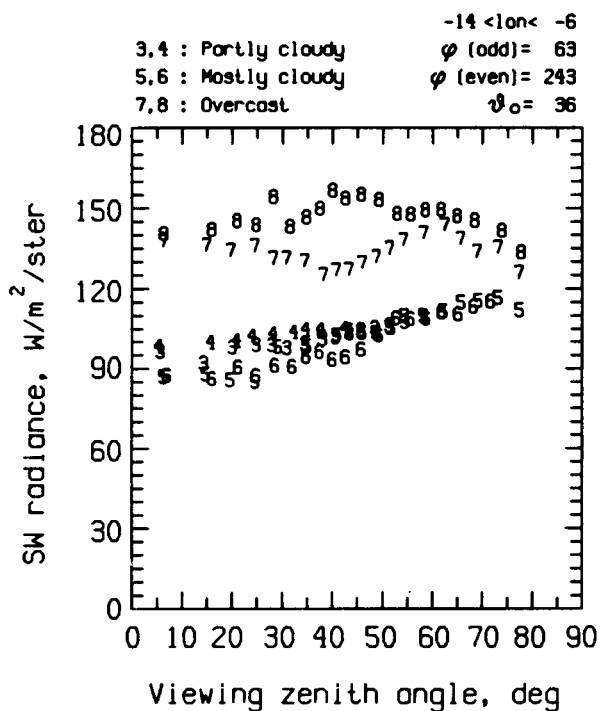


Figure 4.281 Sahel, Aug. 11.

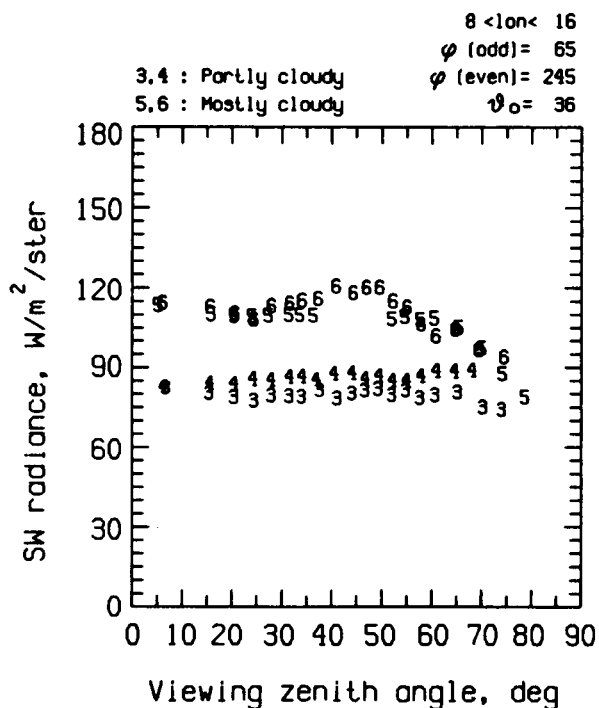


Figure 4.282 Sahel, Aug. 11.

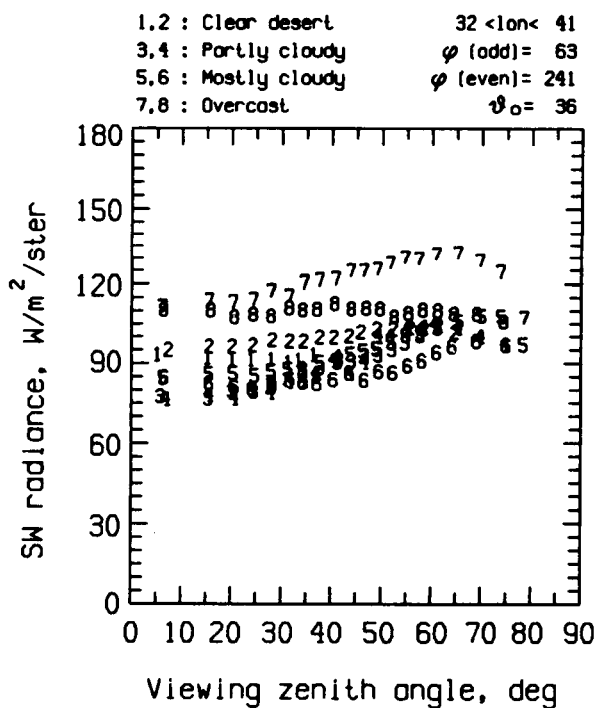


Figure 4.283 Sahel, Aug. 11.

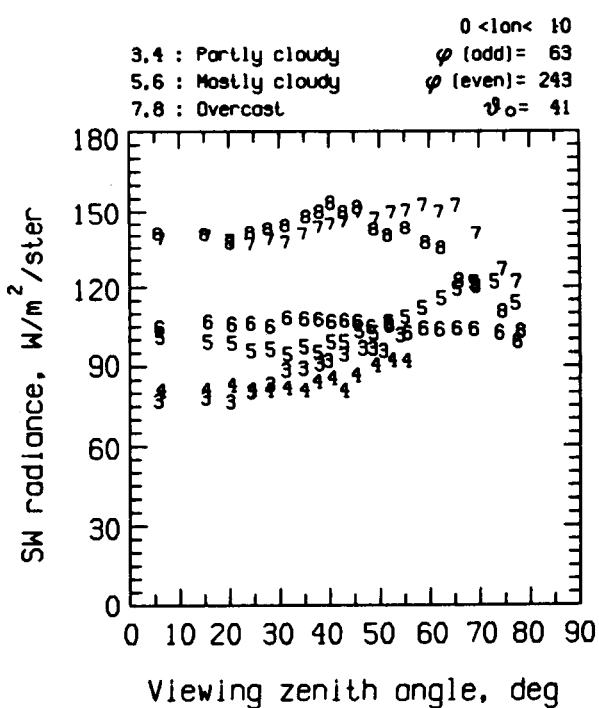


Figure 4.284 Sahel, Aug. 12.

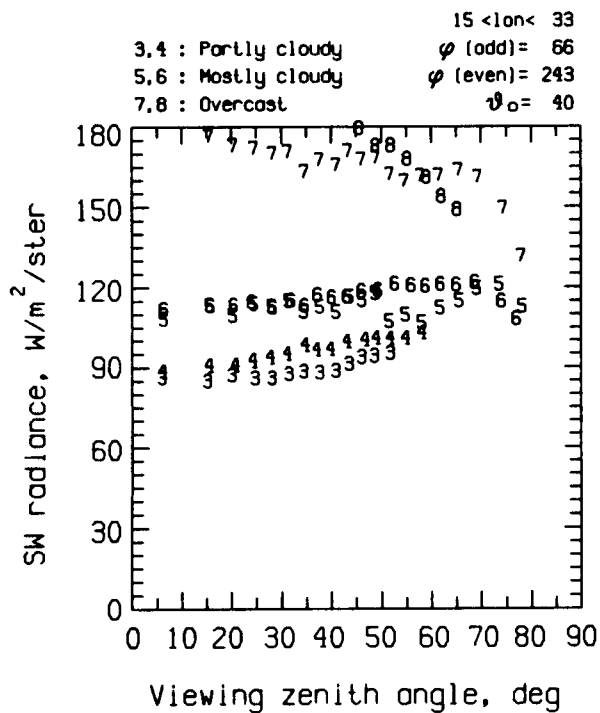


Figure 4.285 Sahel, Aug. 12.

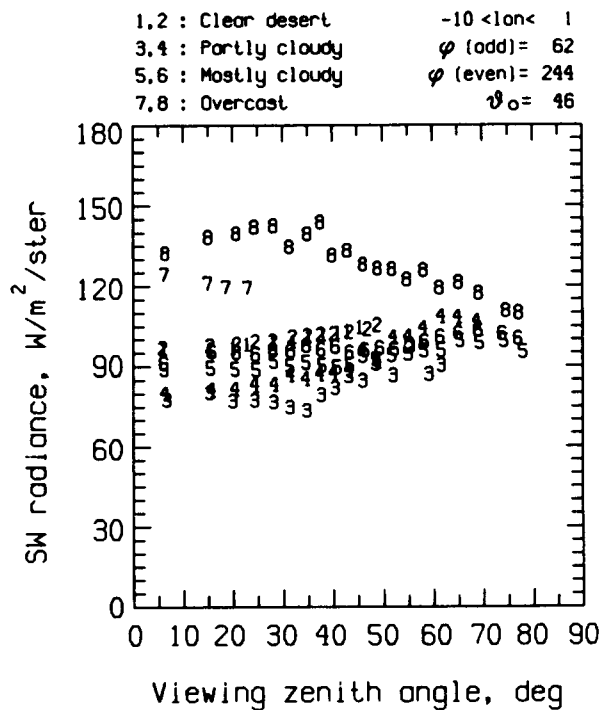


Figure 4.286 Sahel, Aug. 13.

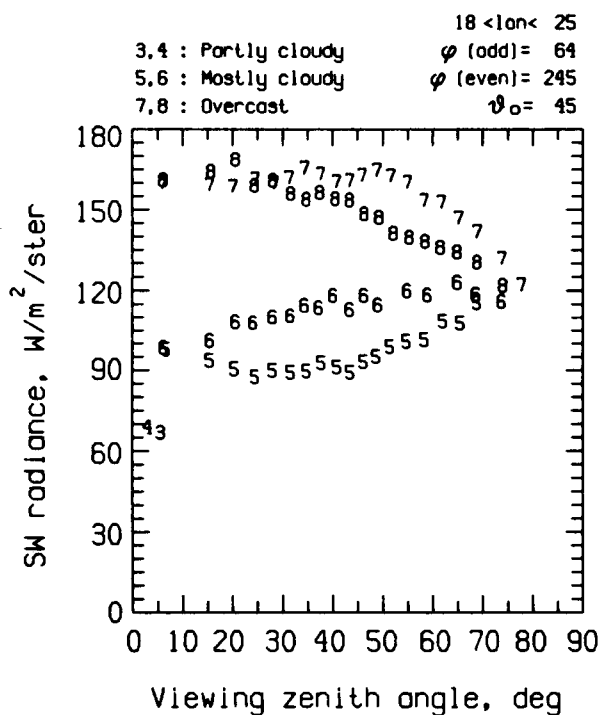


Figure 4.287 Sahel, Aug. 13.

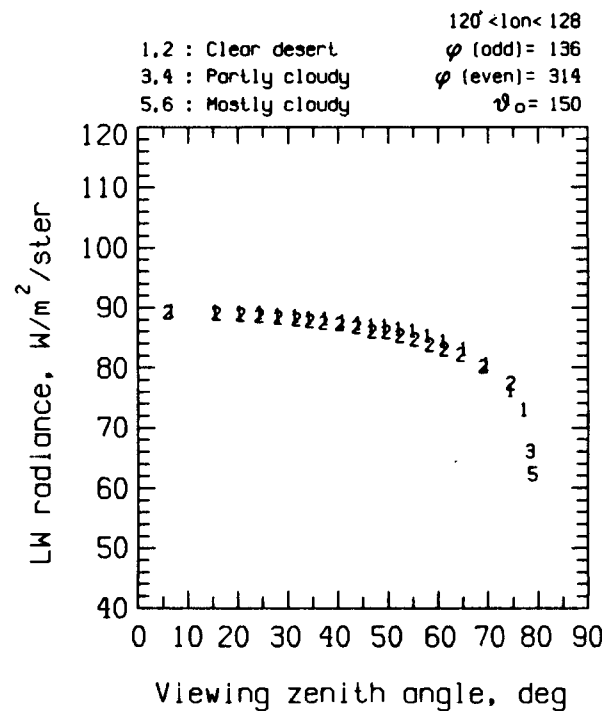


Figure 4.288 Australia, Aug. 8.

9.0 : Clear land 127 <lon< 138
 1.2 : Clear desert φ (odd)= 150
 3.4 : Partly cloudy φ (even)= 331
 5.6 : Mostly cloudy $\vartheta_0 = 40$

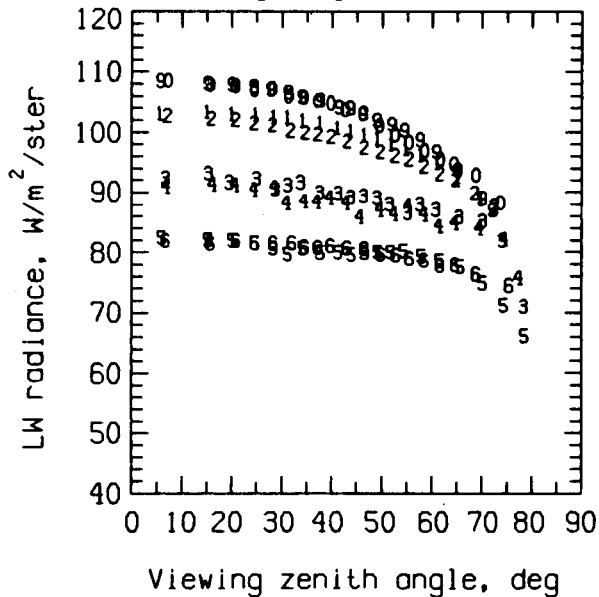


Figure 4.289 Australia, Aug. 8.

9.0 : Clear land 133 <lon< 140
 1.2 : Clear desert φ (odd)= 137
 3.4 : Partly cloudy φ (even)= 316
 5.6 : Mostly cloudy $\vartheta_0 = 144$

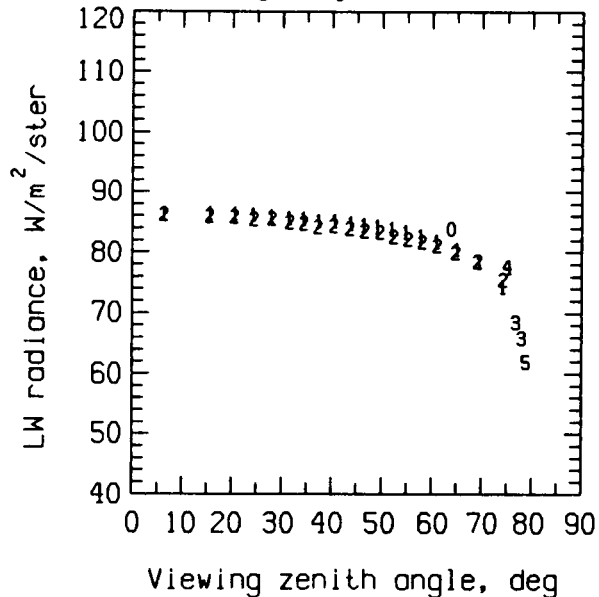


Figure 4.290 Australia, Aug. 9.

120 <lon< 130
 1.2 : Clear desert φ (odd)= 143
 3.4 : Partly cloudy φ (even)= 324
 5.6 : Mostly cloudy $\vartheta_0 = 40$

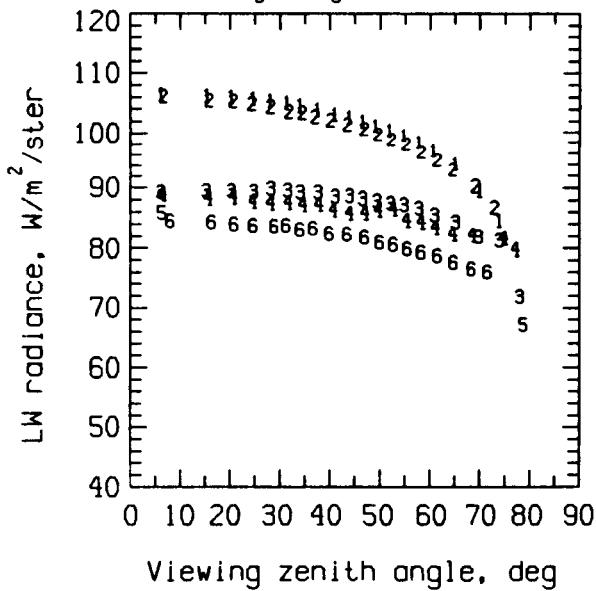


Figure 4.291 Australia, Aug. 9.

126 <lon< 137
 9.0 : Clear land
 1.2 : Clear desert φ (odd)= 132
 3.4 : Partly cloudy φ (even)= 311
 5.6 : Mostly cloudy $\vartheta_0 = 141$

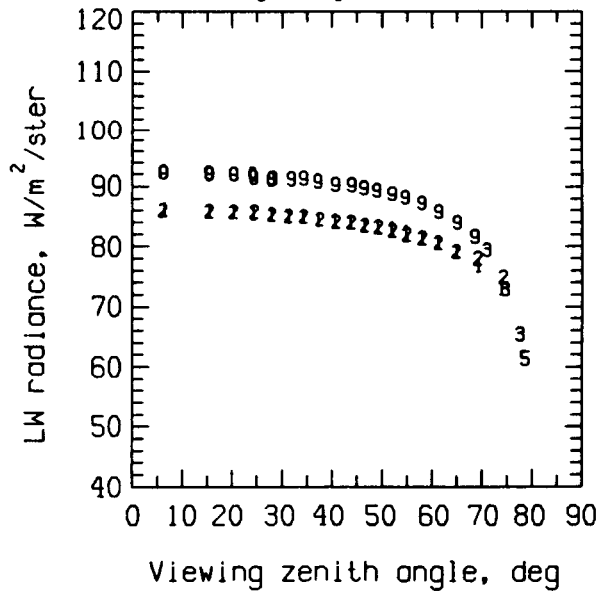


Figure 4.292 Australia, Aug. 10.

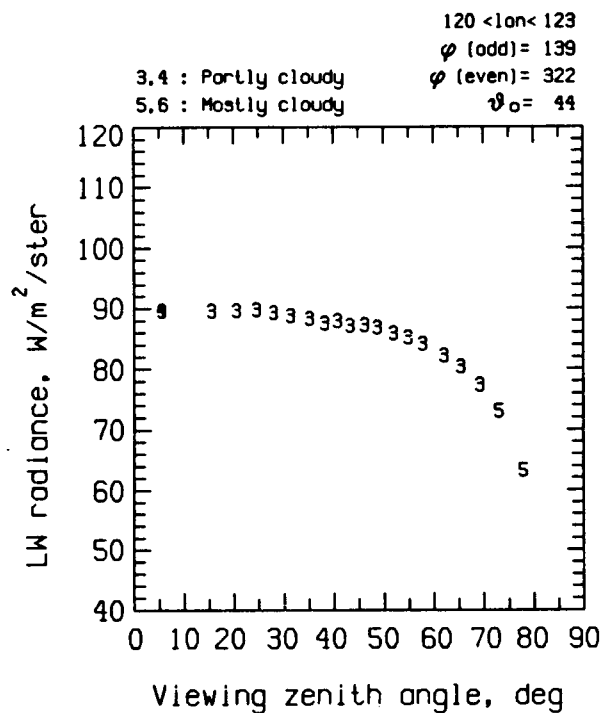


Figure 4.293 Australia, Aug. 10.

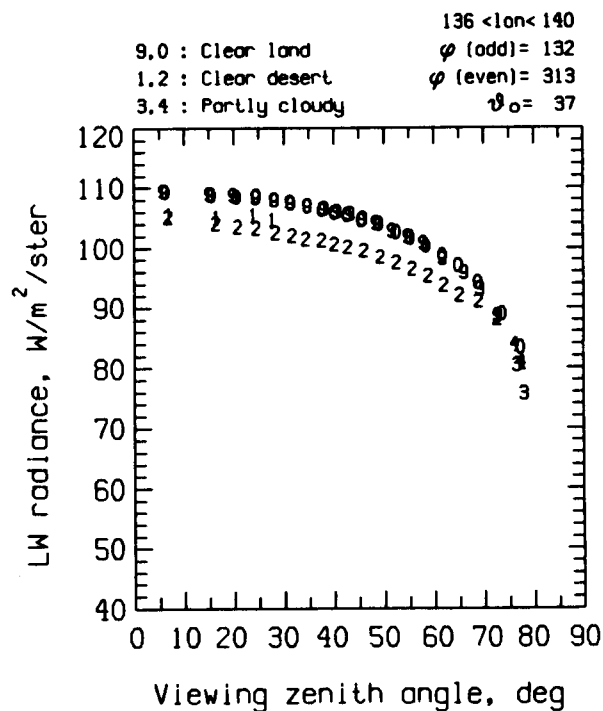


Figure 4.294 Australia, Aug. 10.

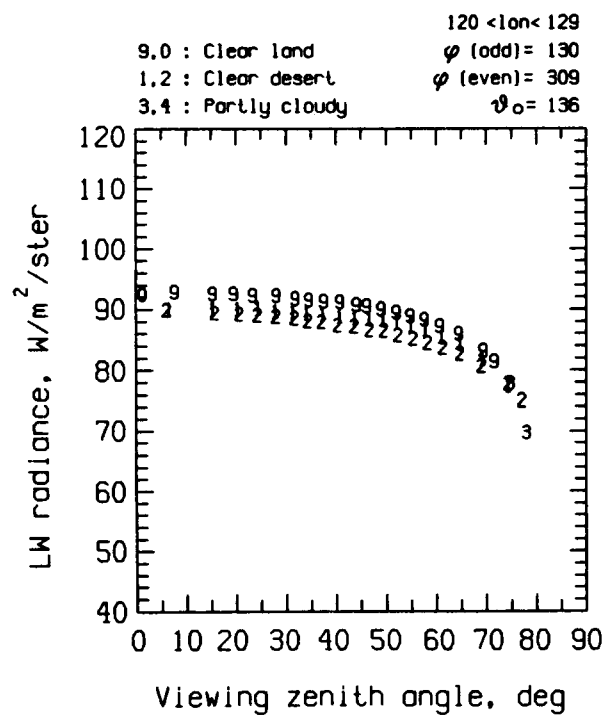


Figure 4.295 Australia, Aug. 11.

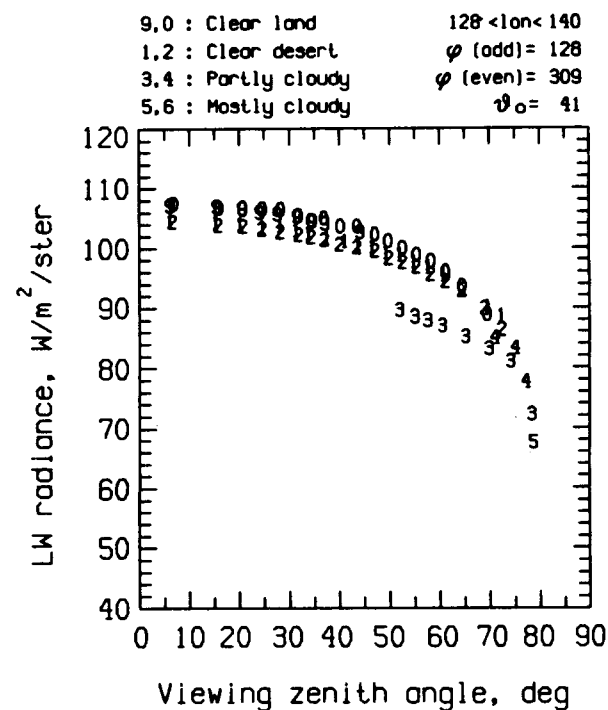


Figure 4.296 Australia, Aug. 11.

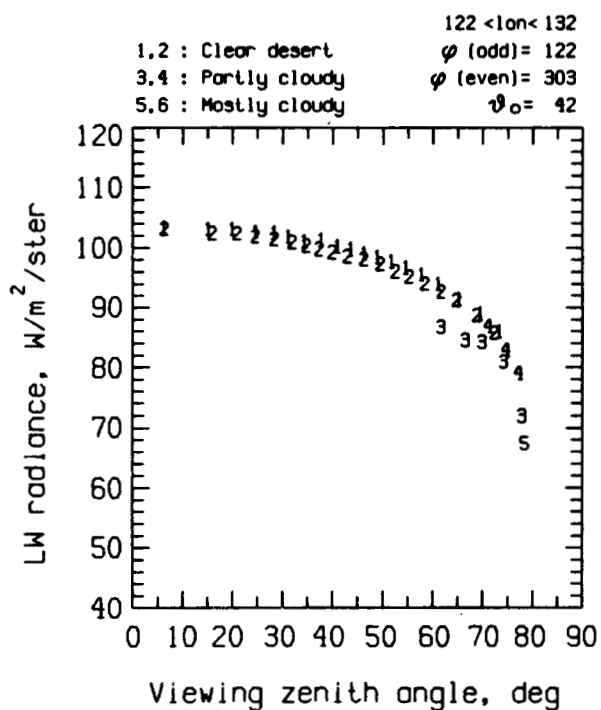


Figure 4.297 Australia, Aug. 12.

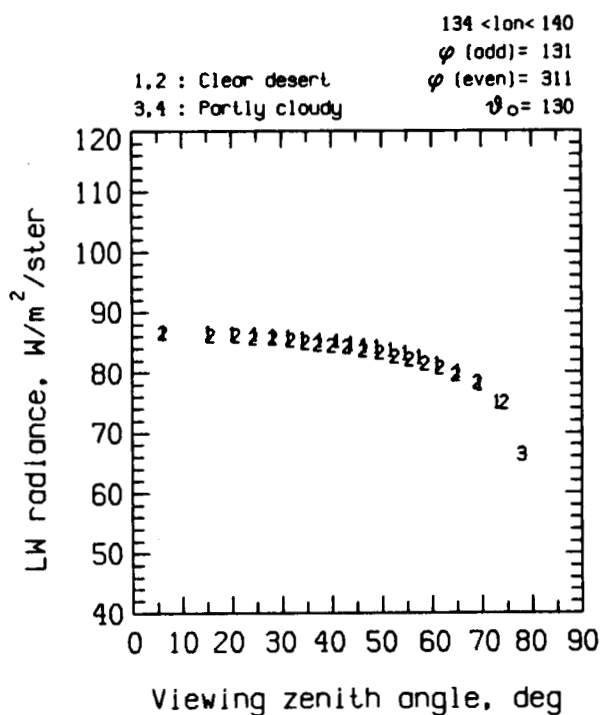


Figure 4.298 Australia, Aug. 12.

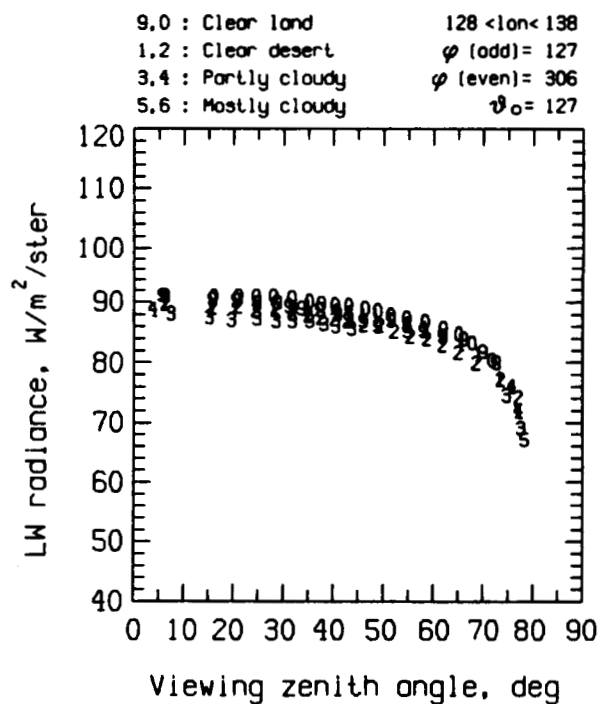


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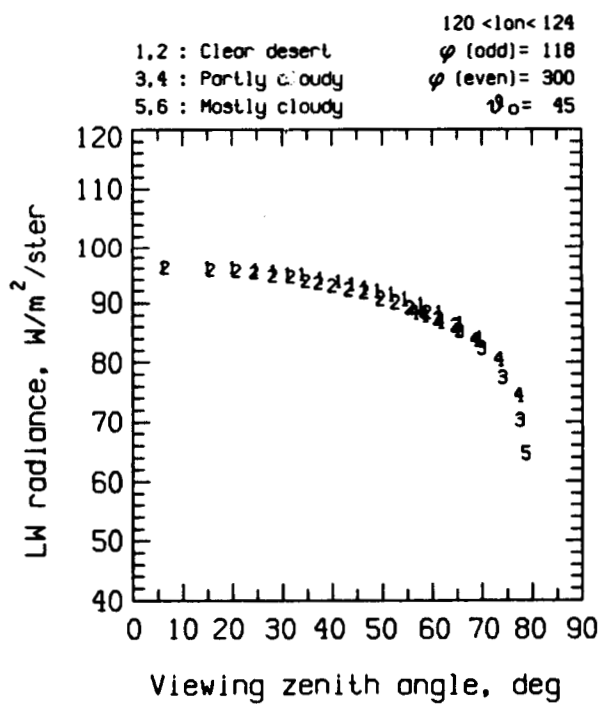


Figure 4.300 Australia, Aug. 13.

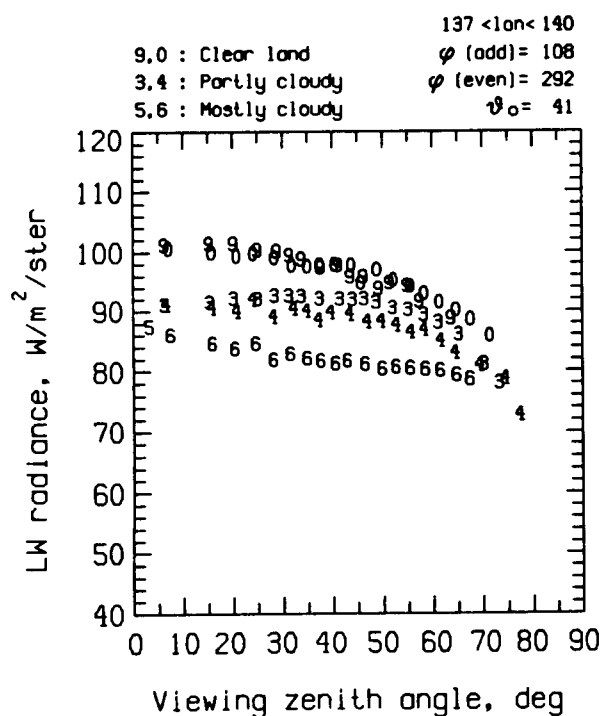


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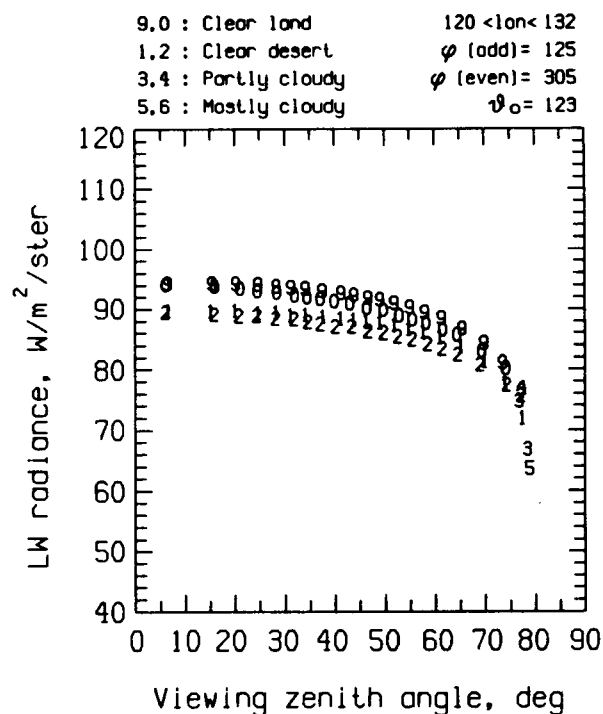


Figure 4.302 Australia, Aug. 14.

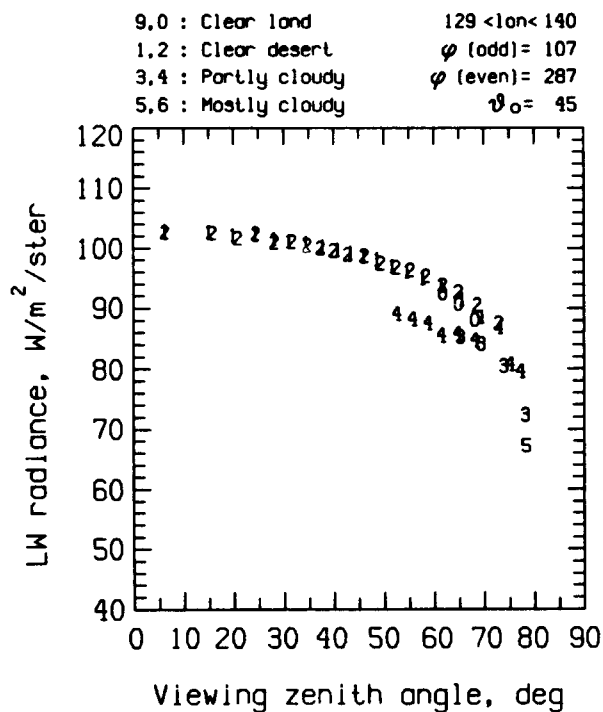


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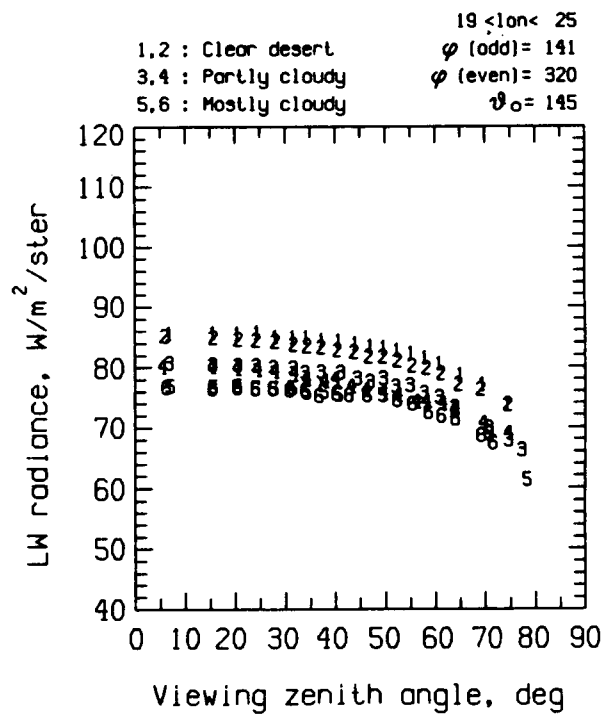


Figure 4.304 Kalahari, Aug. 8.

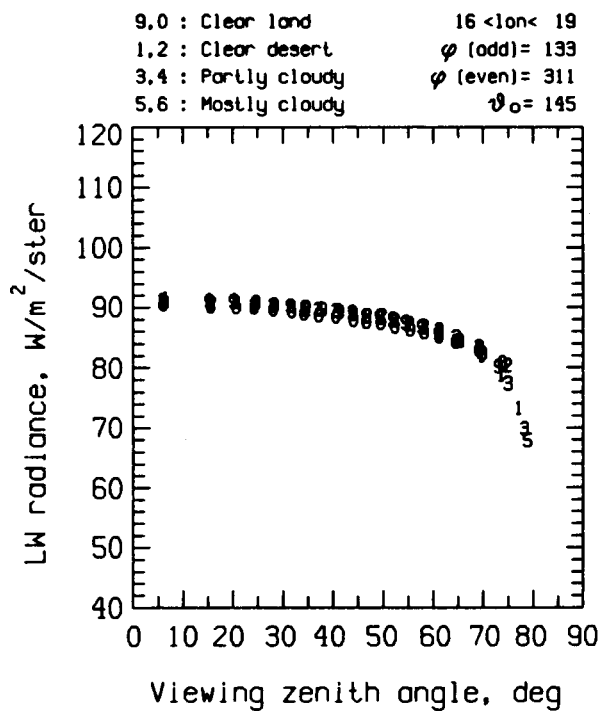


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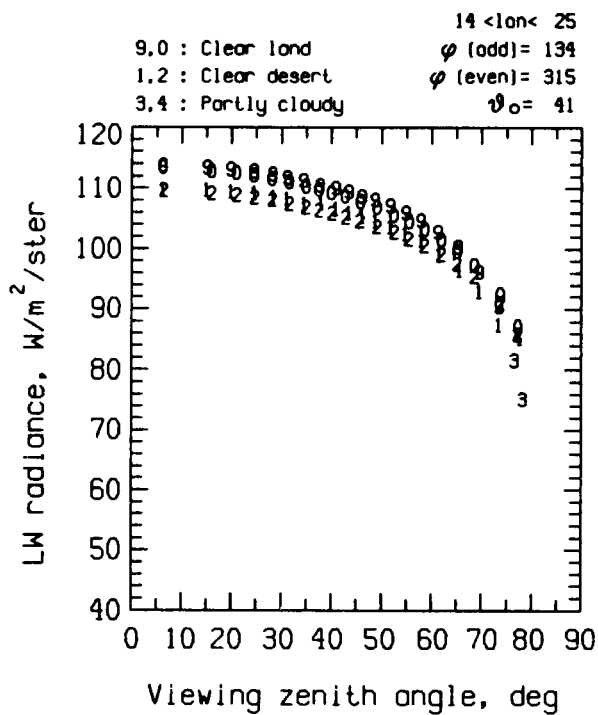


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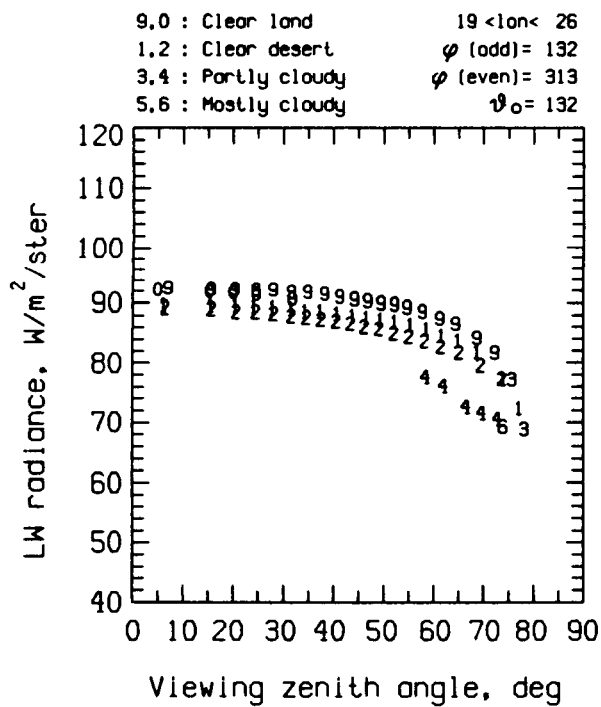


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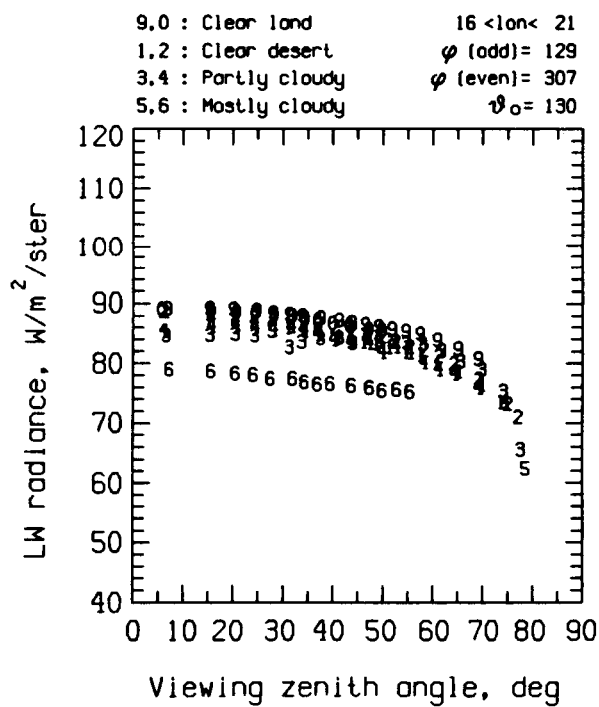


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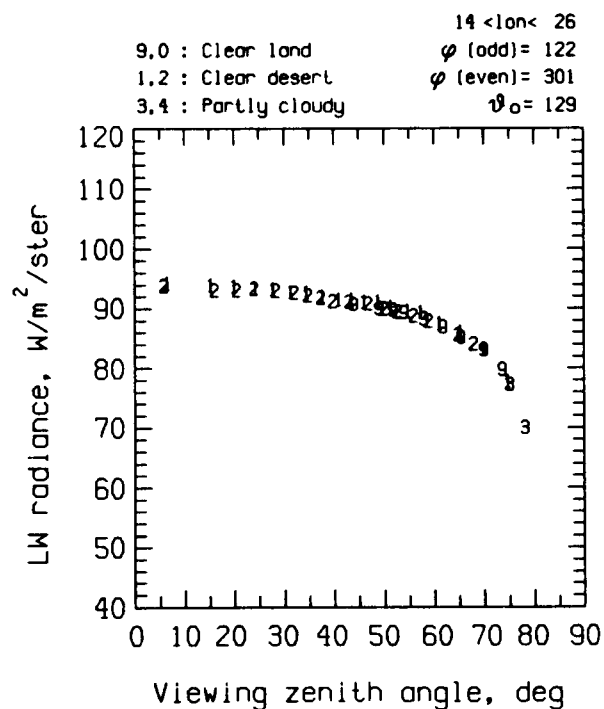


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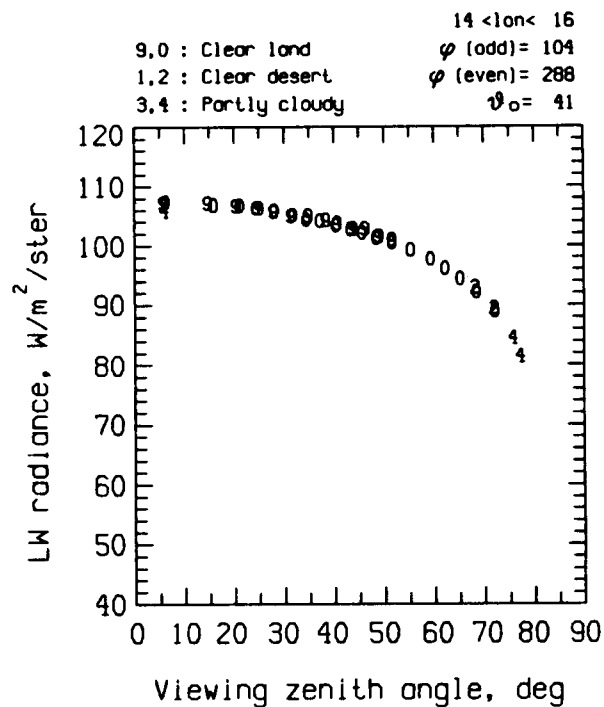
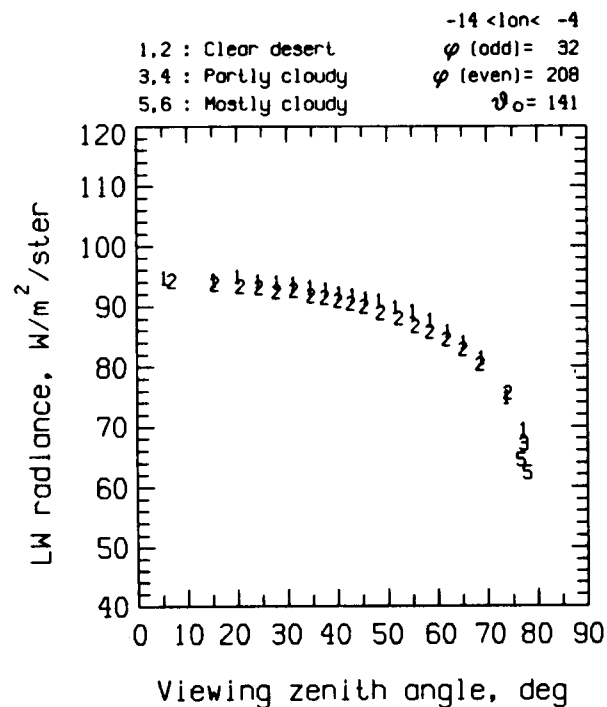


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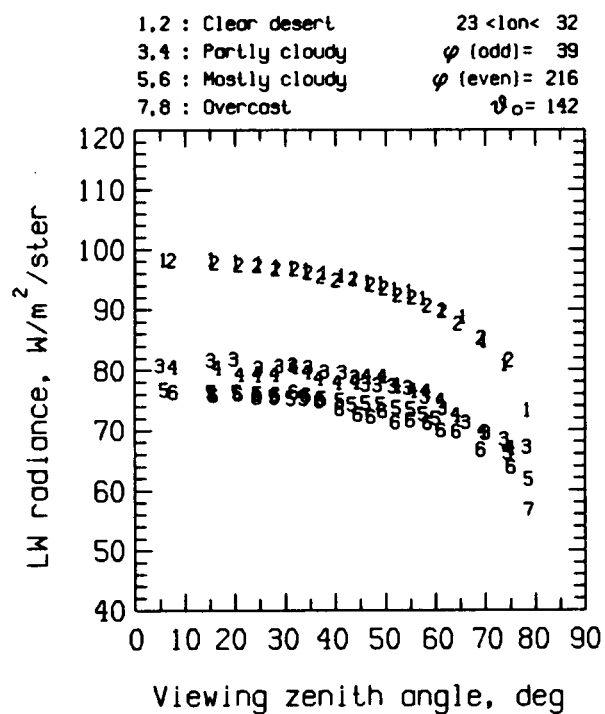


Figure 4.313 Sahara, Aug. 8.

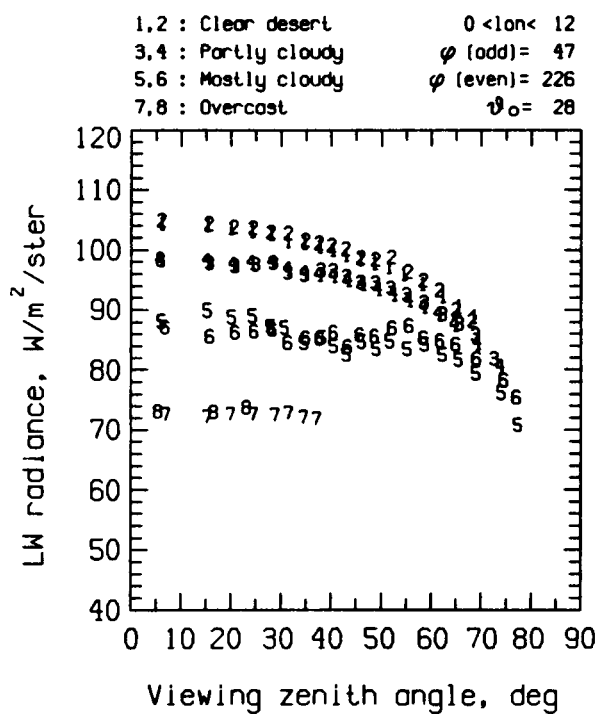


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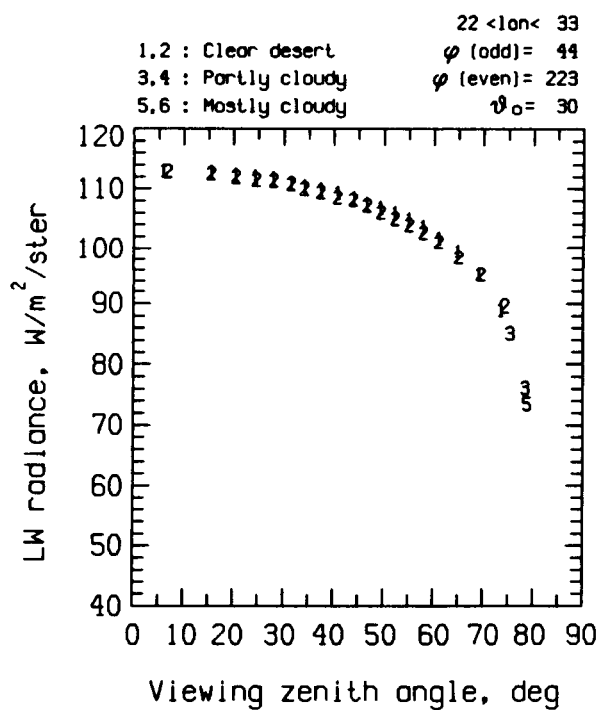


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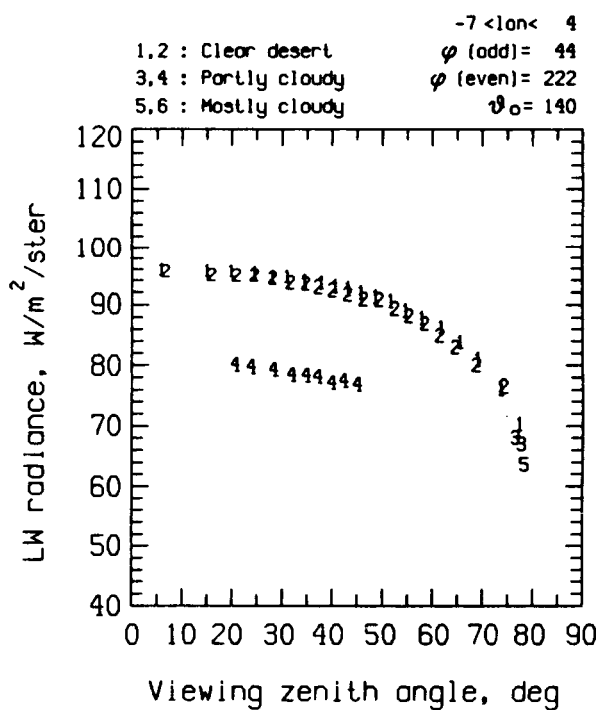


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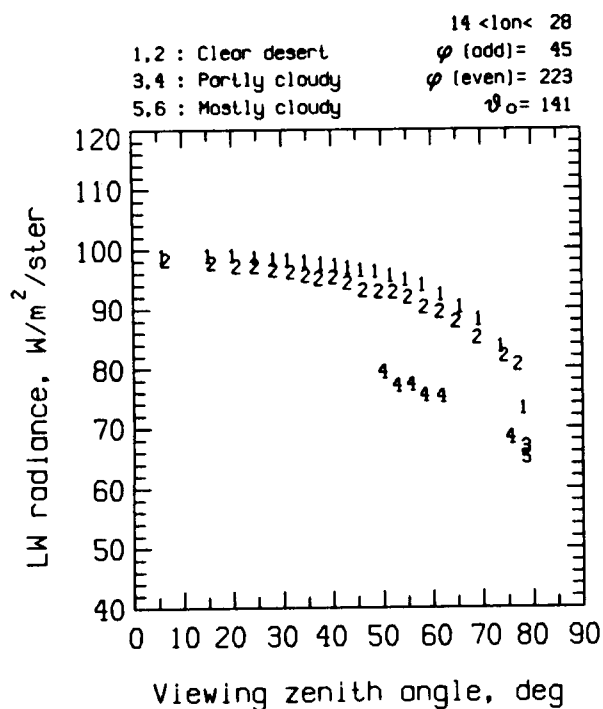


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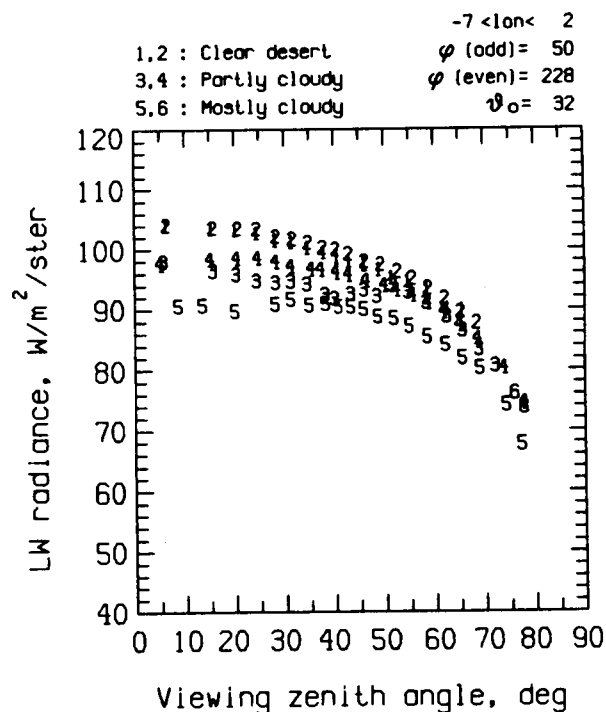


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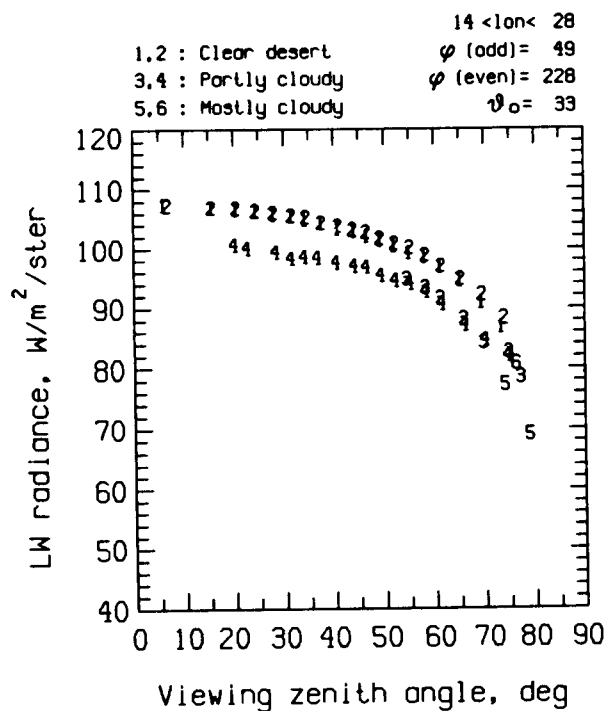


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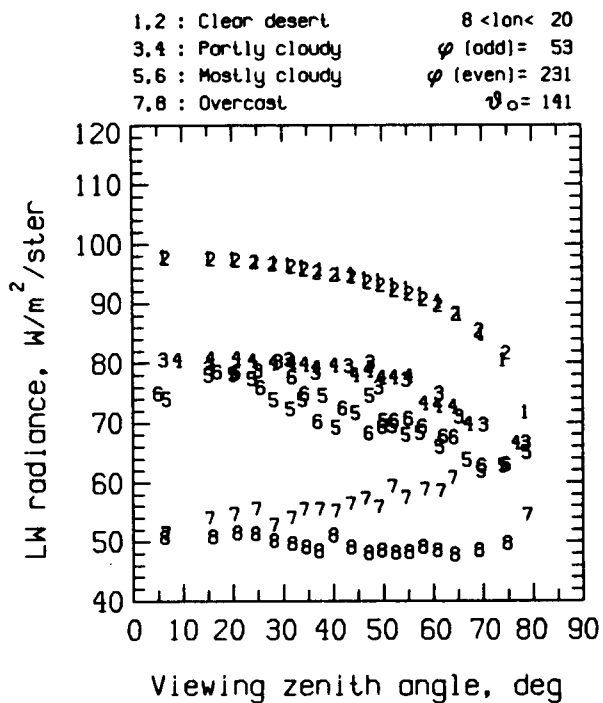


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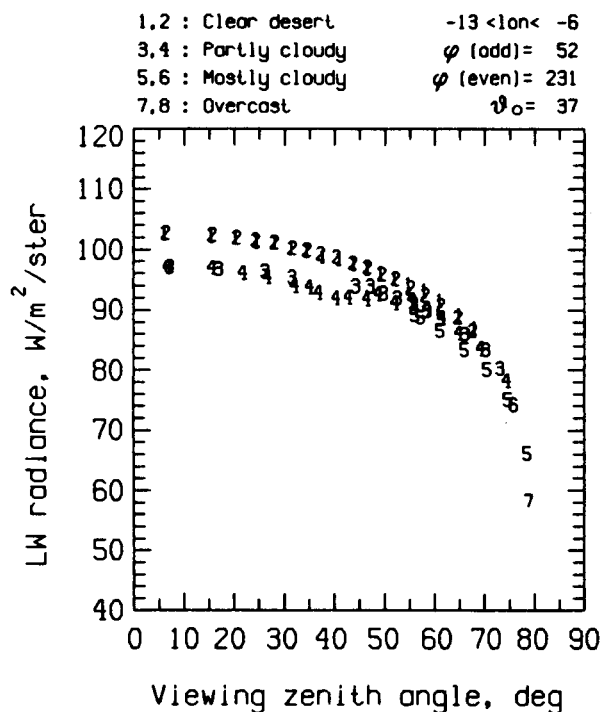


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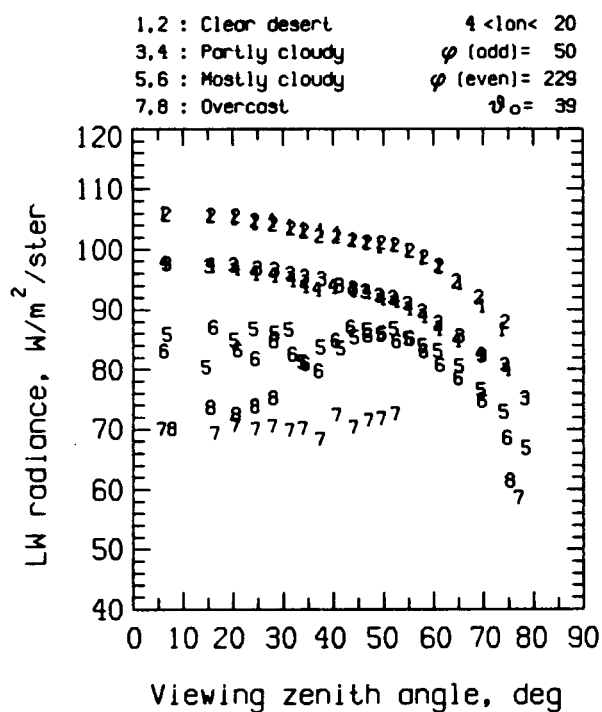


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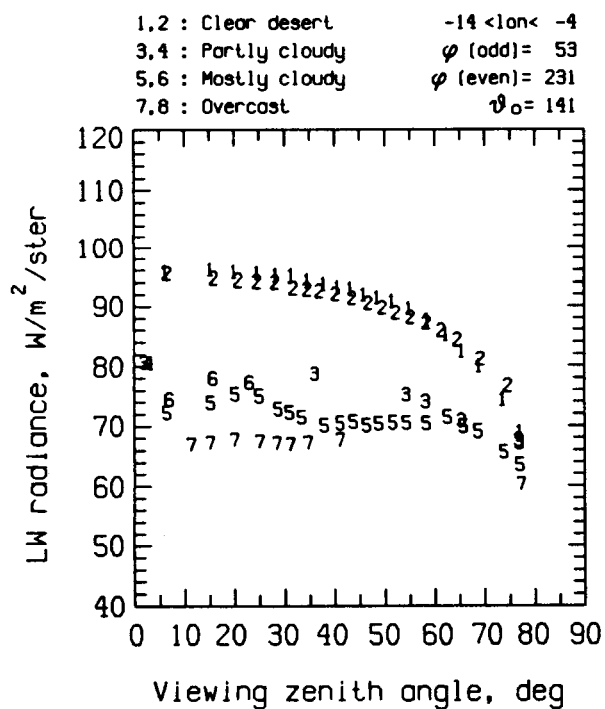


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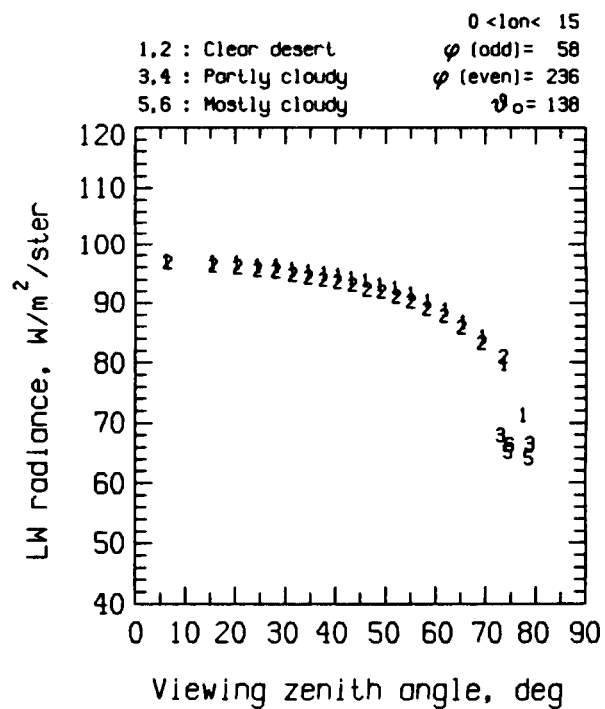


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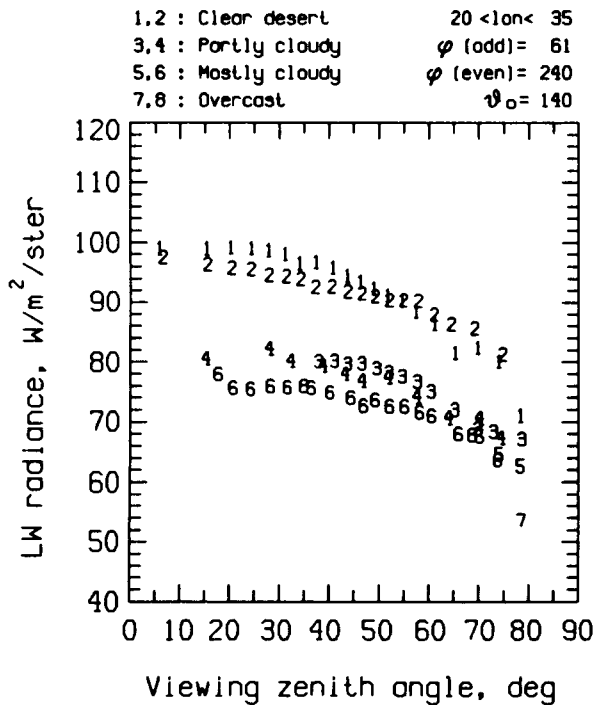


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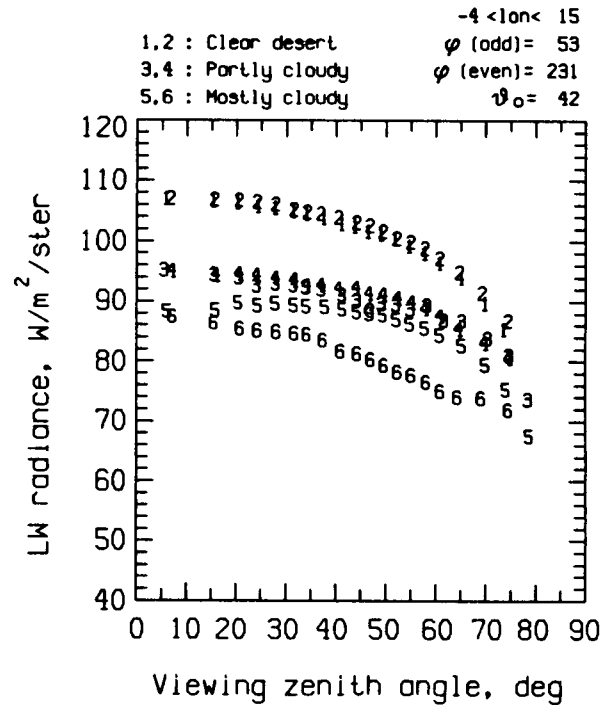


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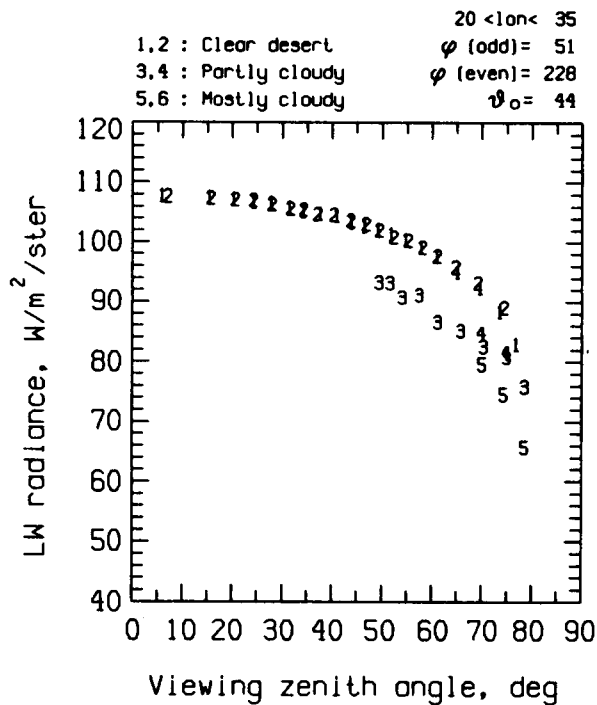


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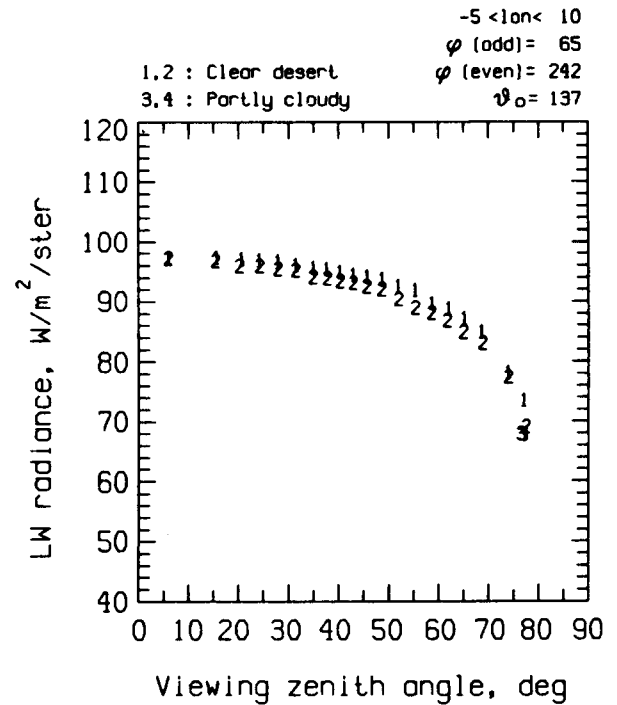


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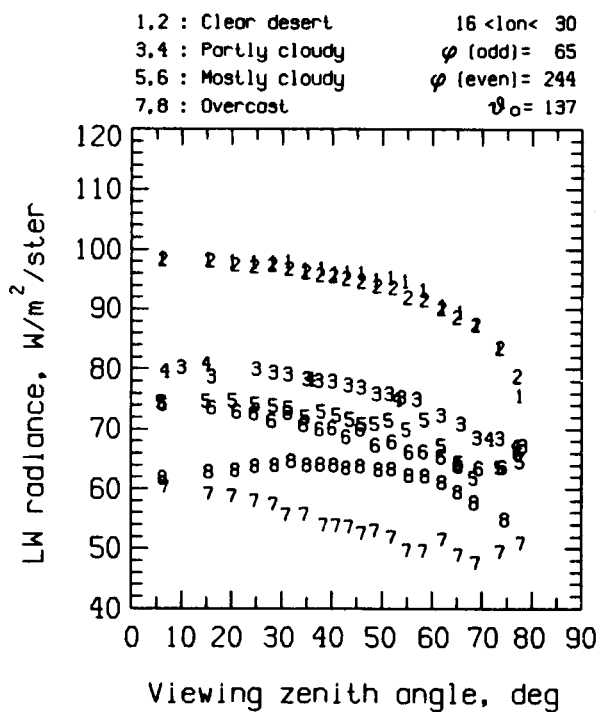


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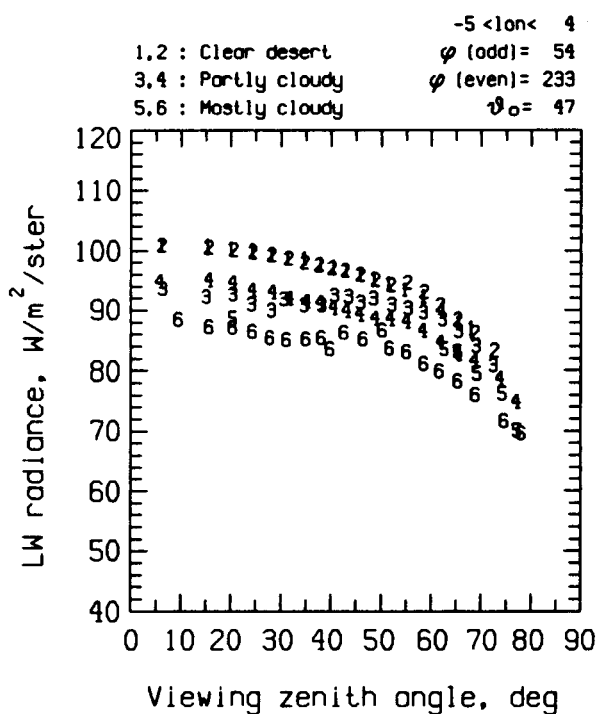


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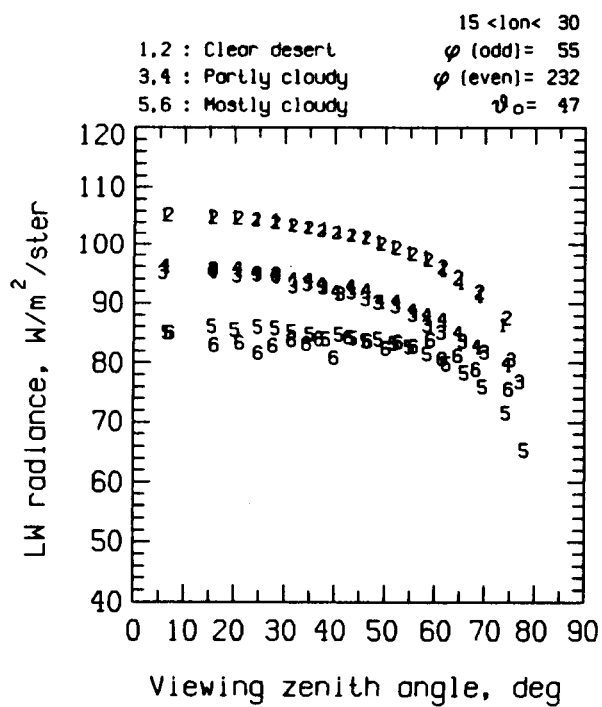


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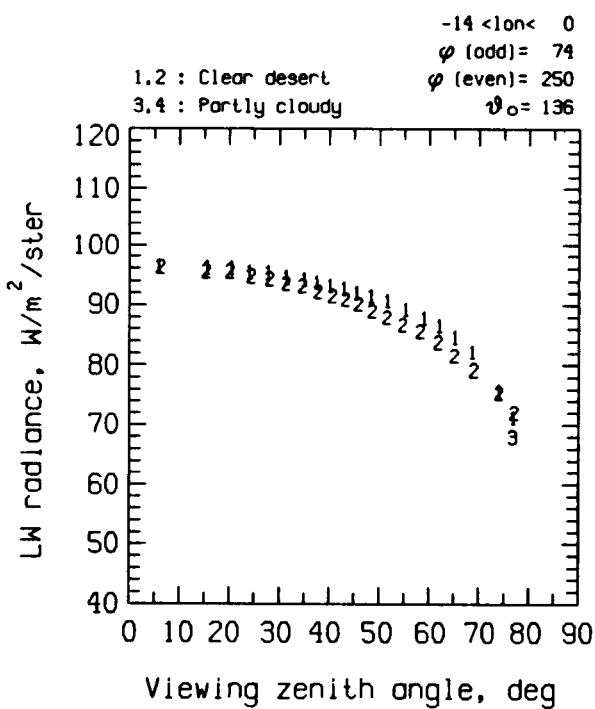


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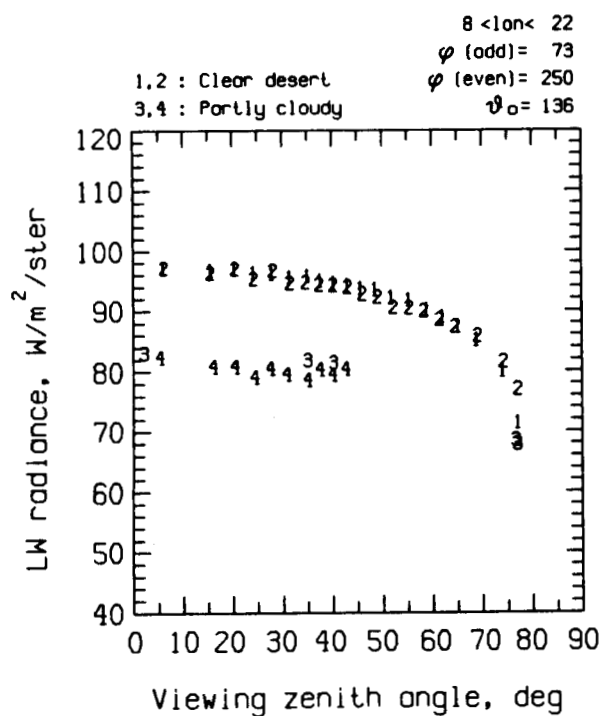


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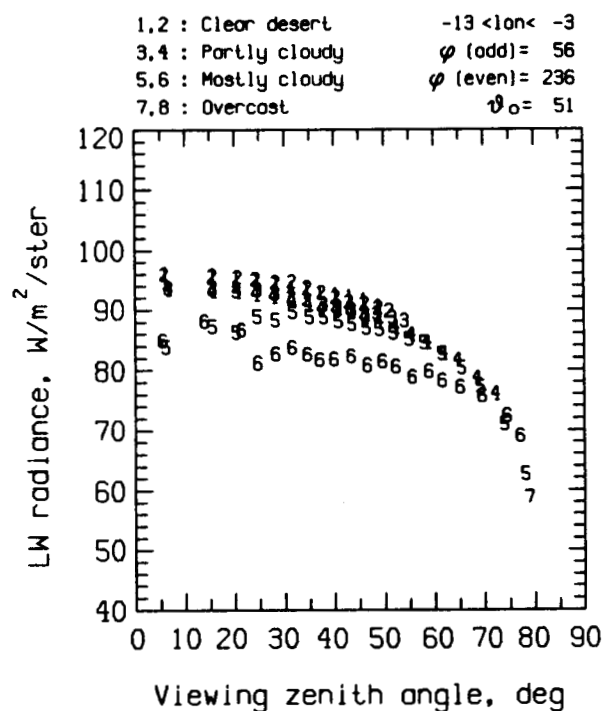


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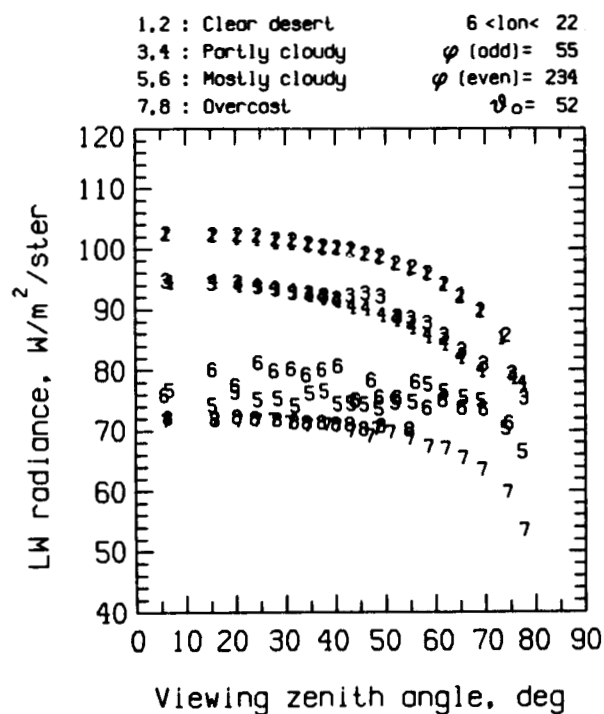


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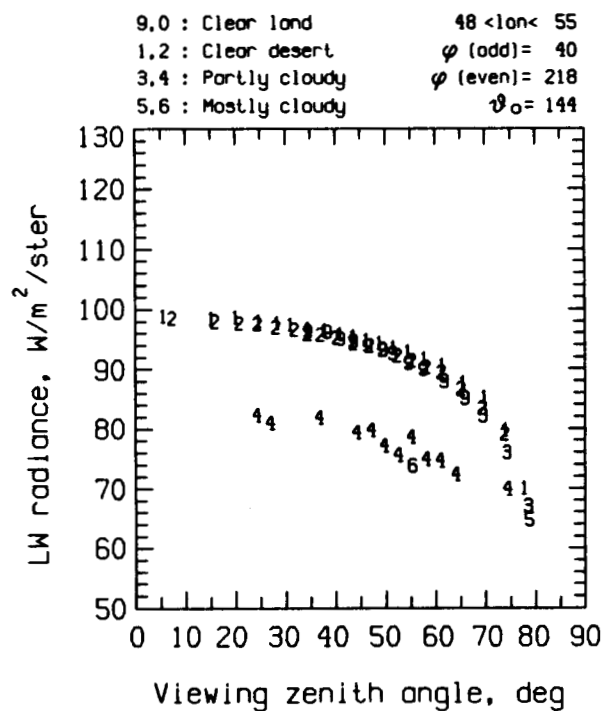


Figure 4.336 Arabian peninsula, Aug. 8.

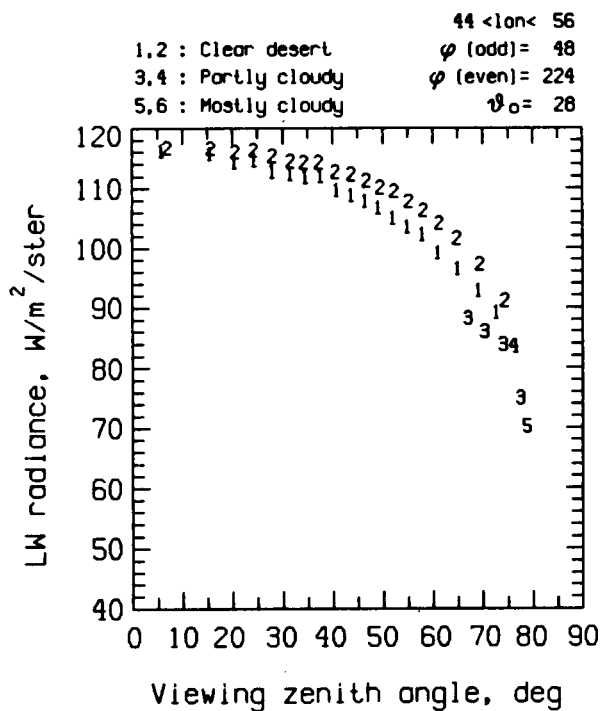


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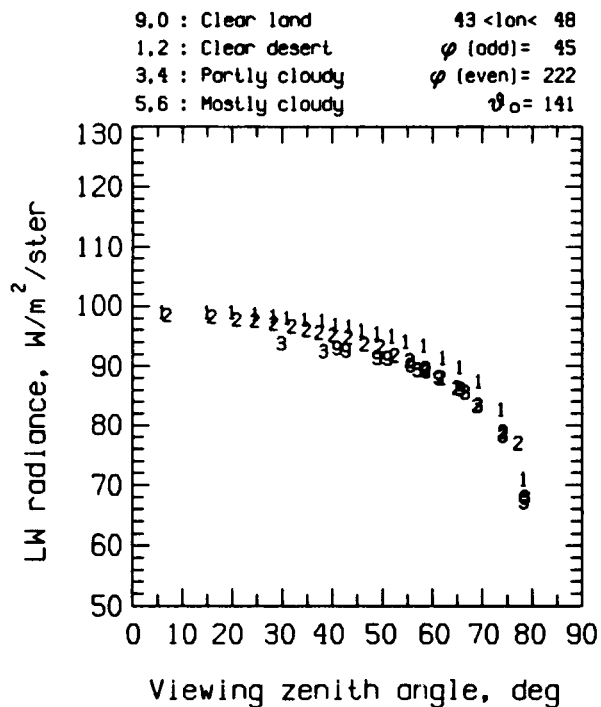


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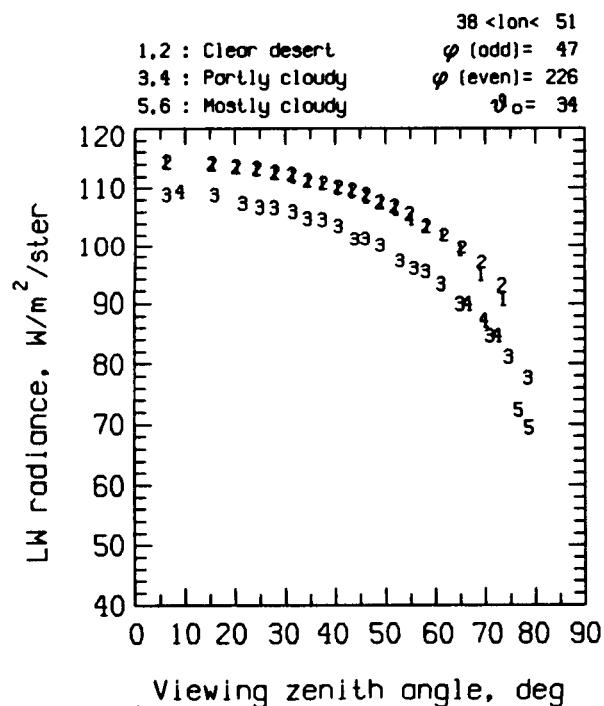


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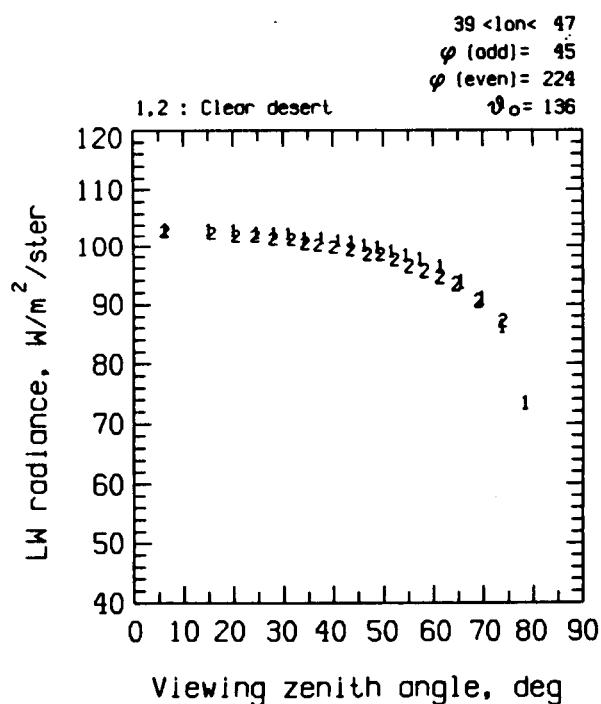


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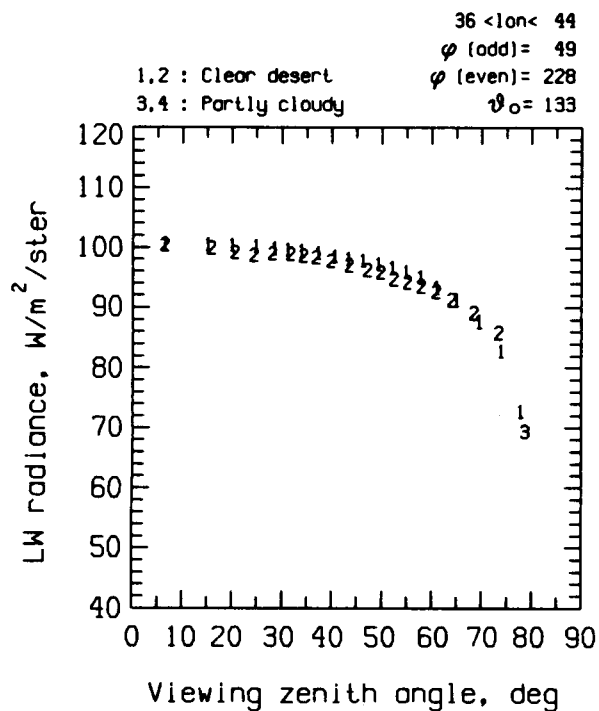


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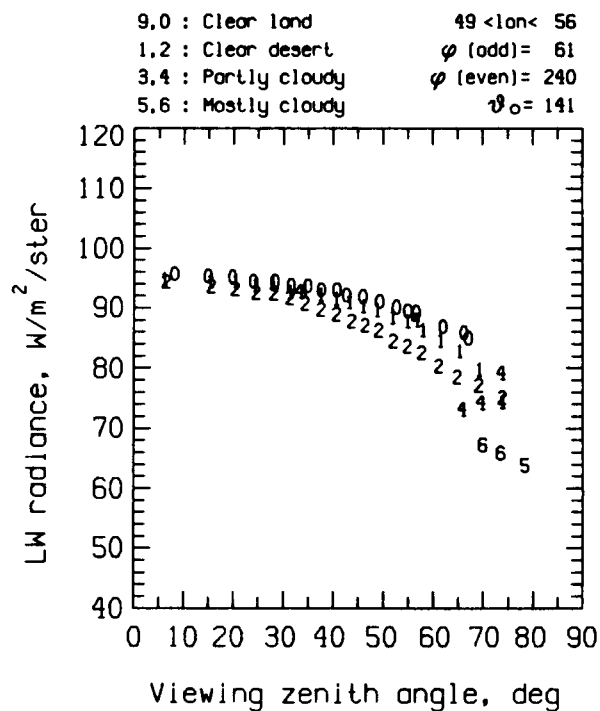


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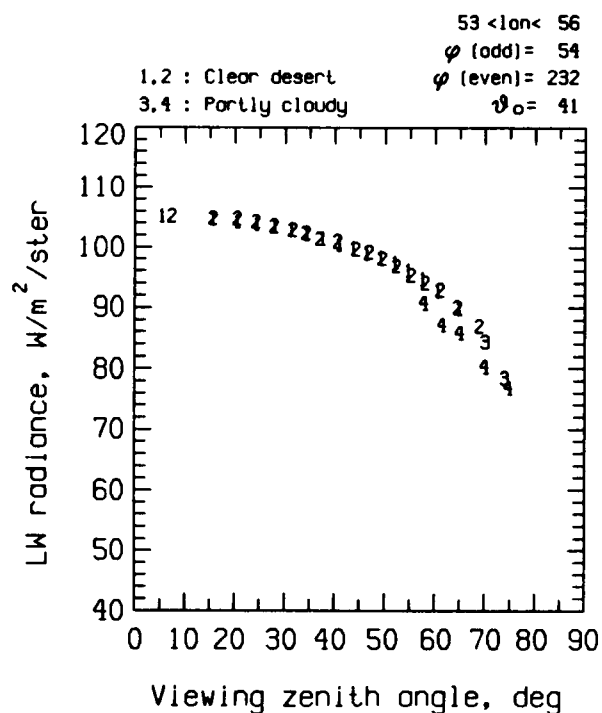


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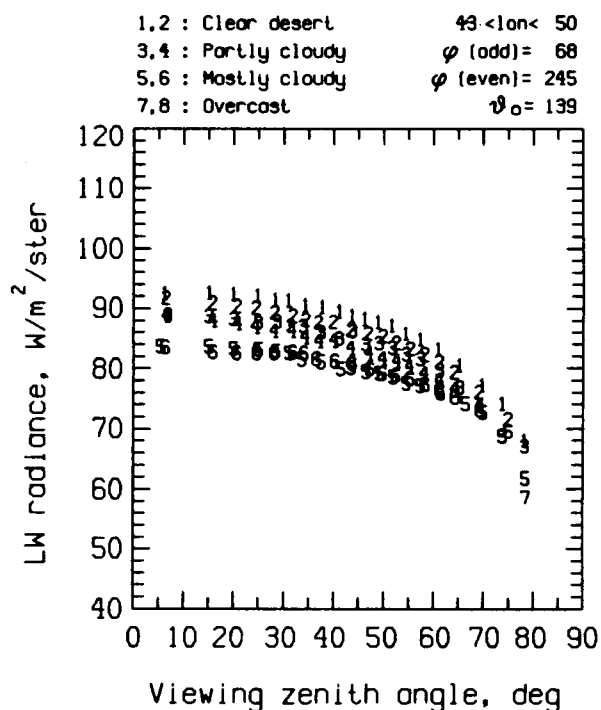


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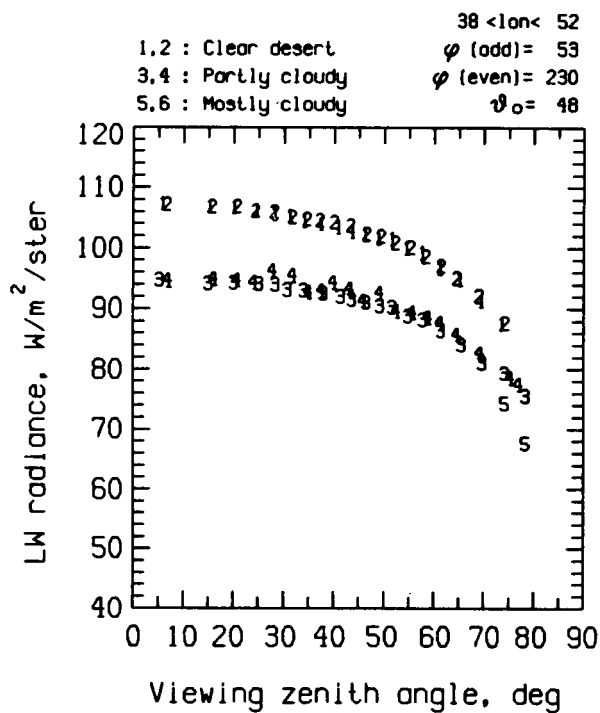


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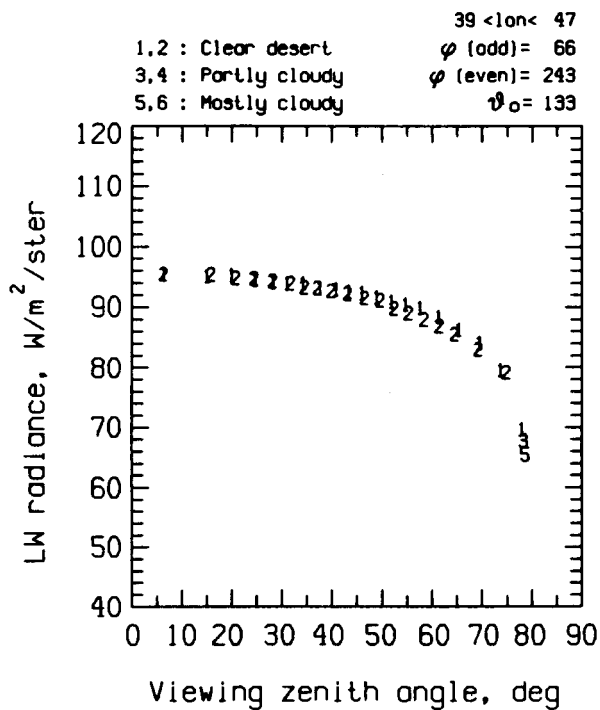


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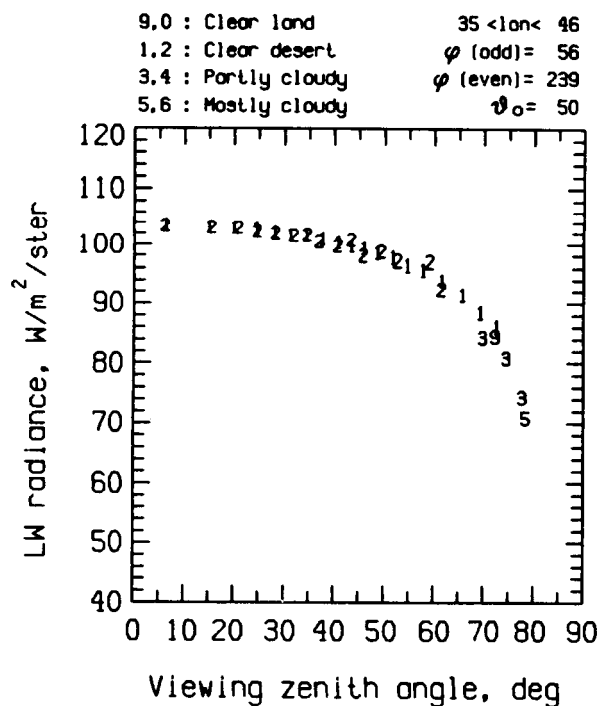


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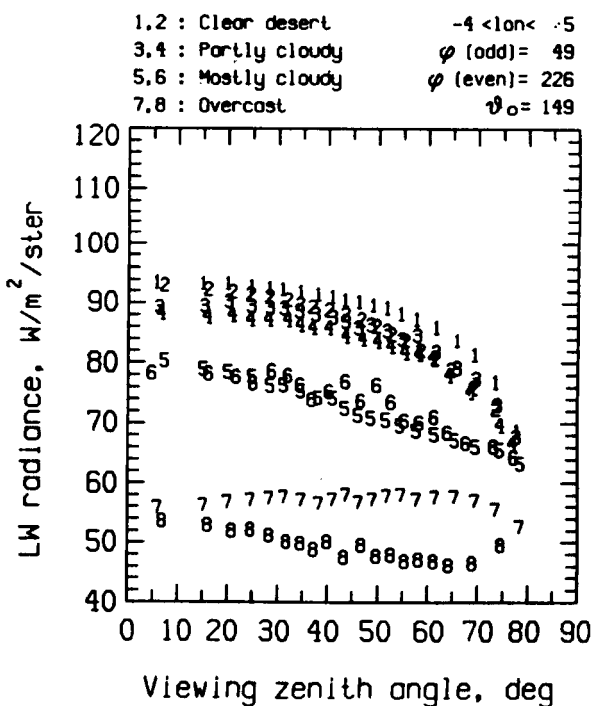


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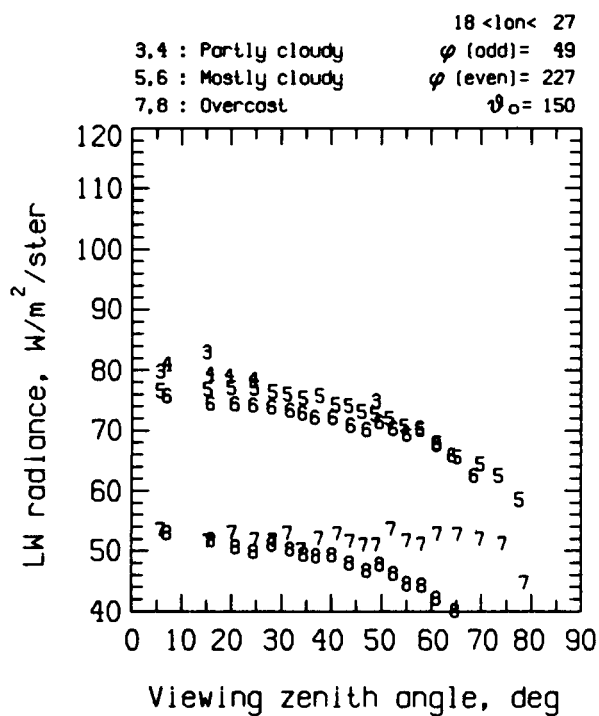


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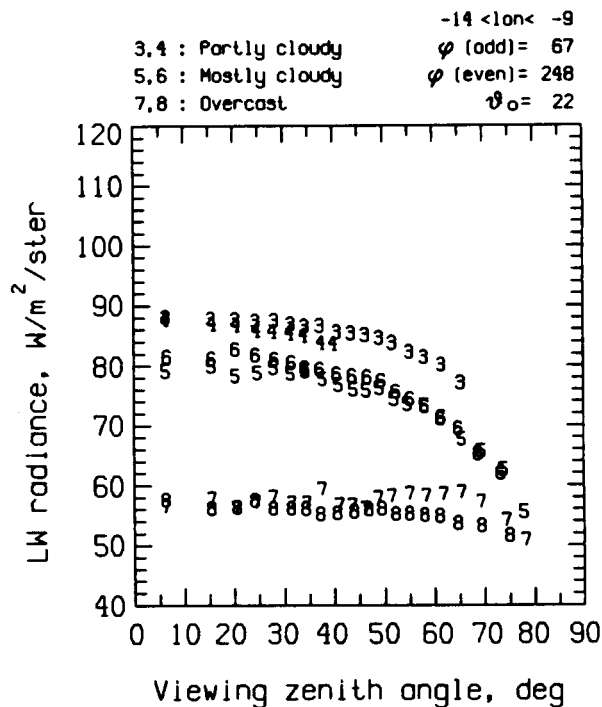


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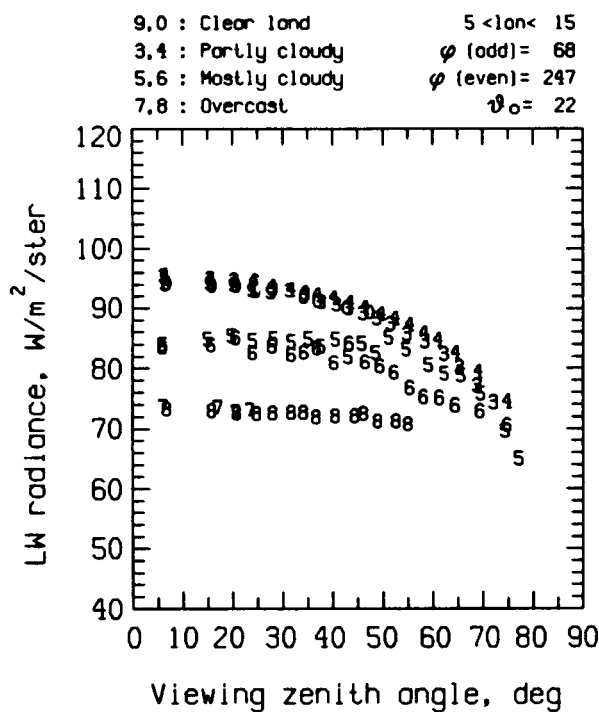


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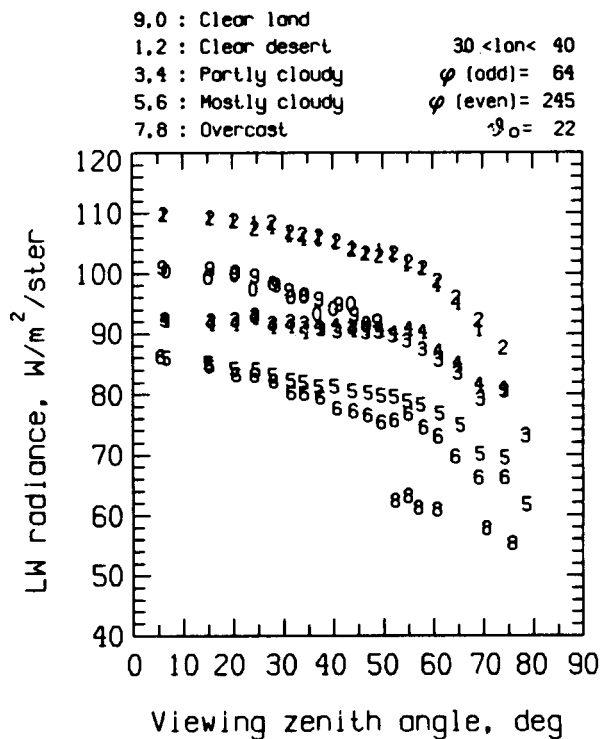


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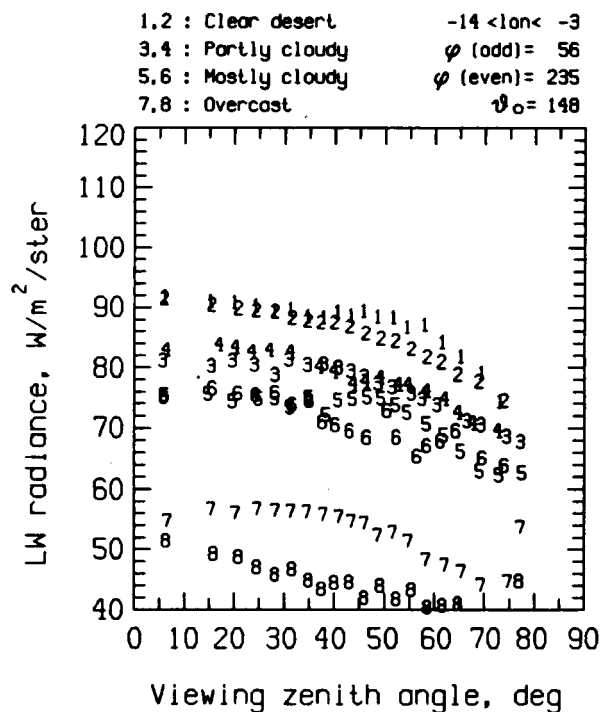


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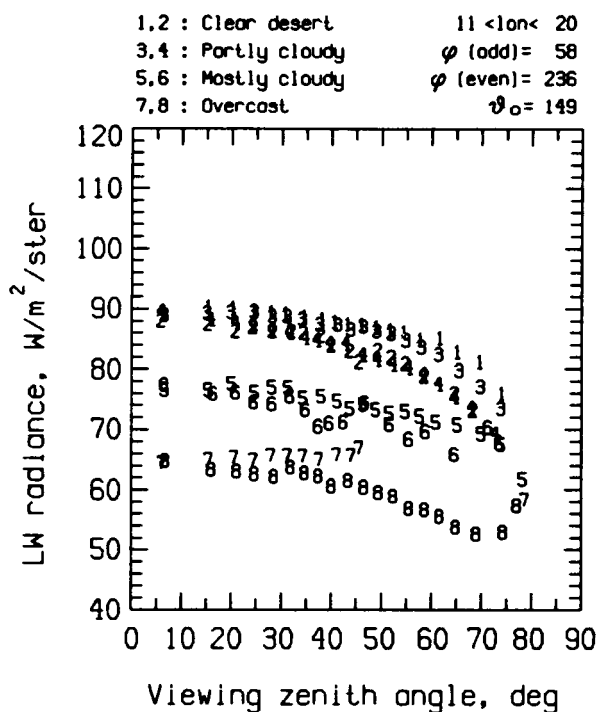


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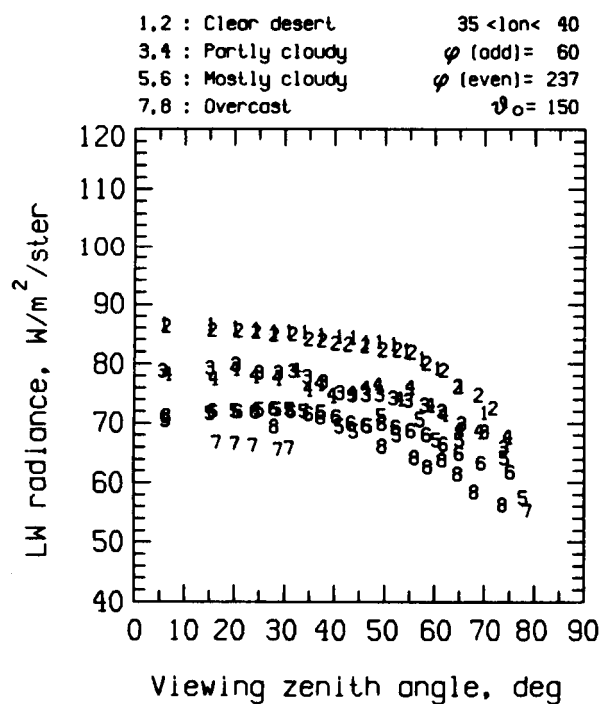


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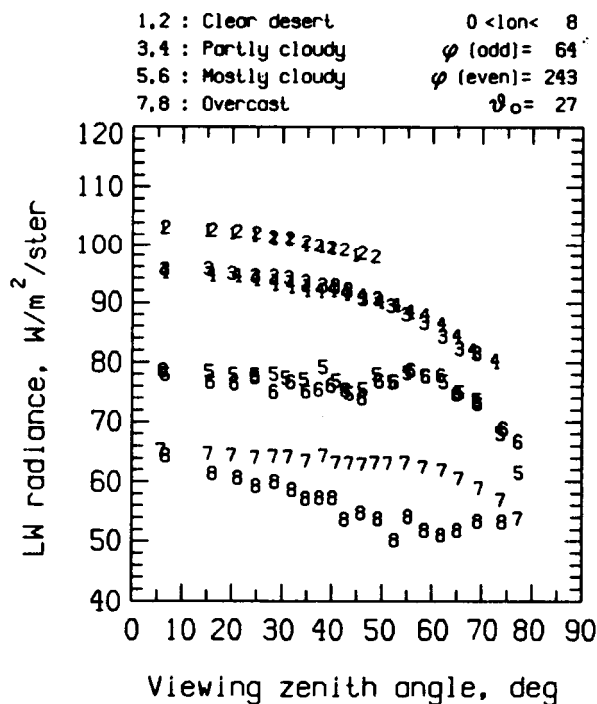


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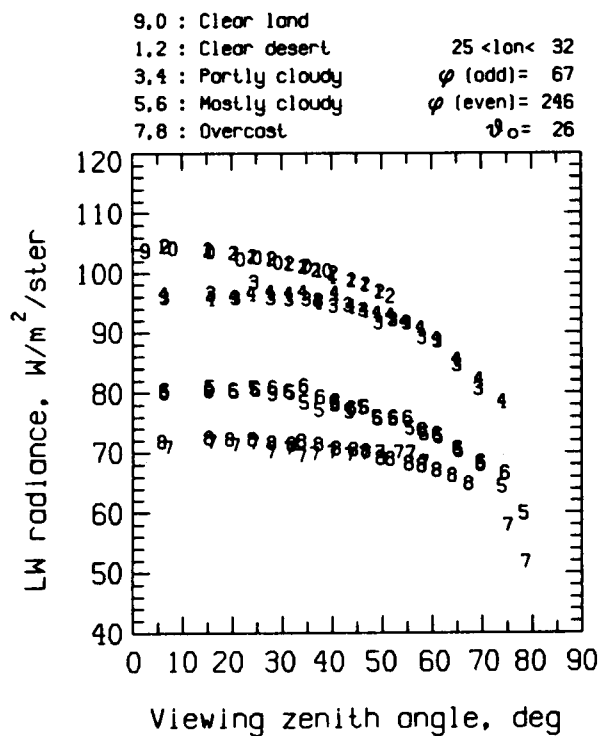


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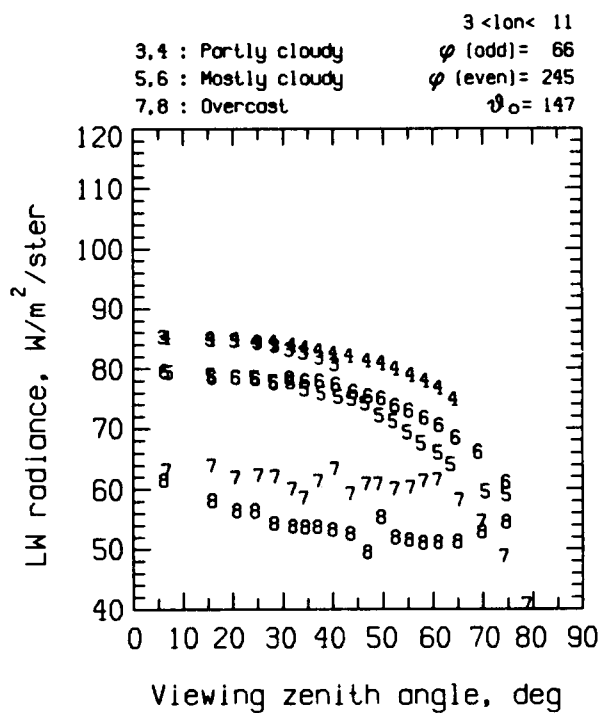


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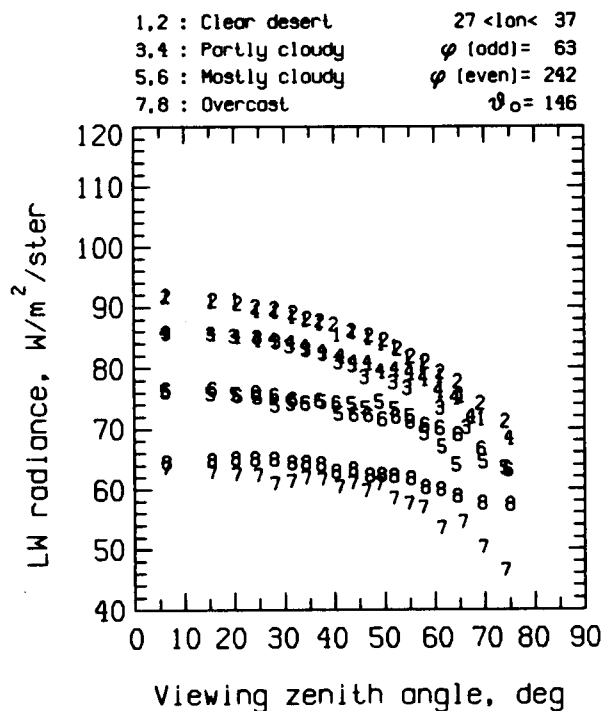


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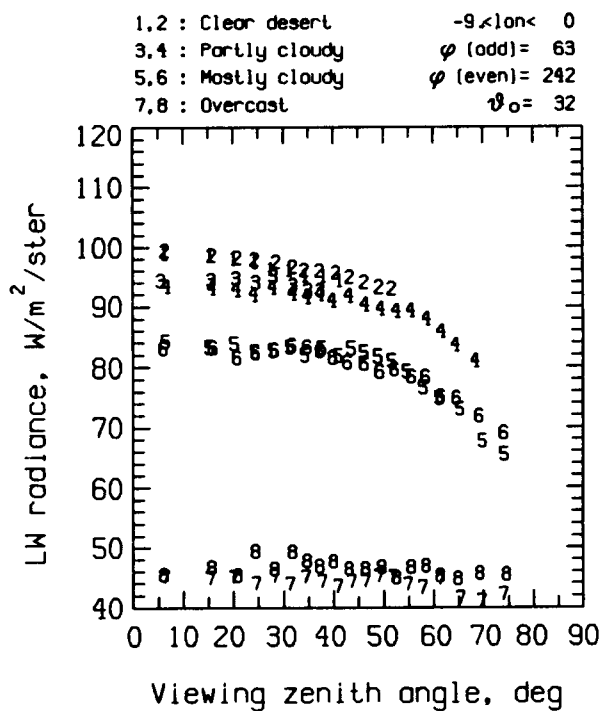


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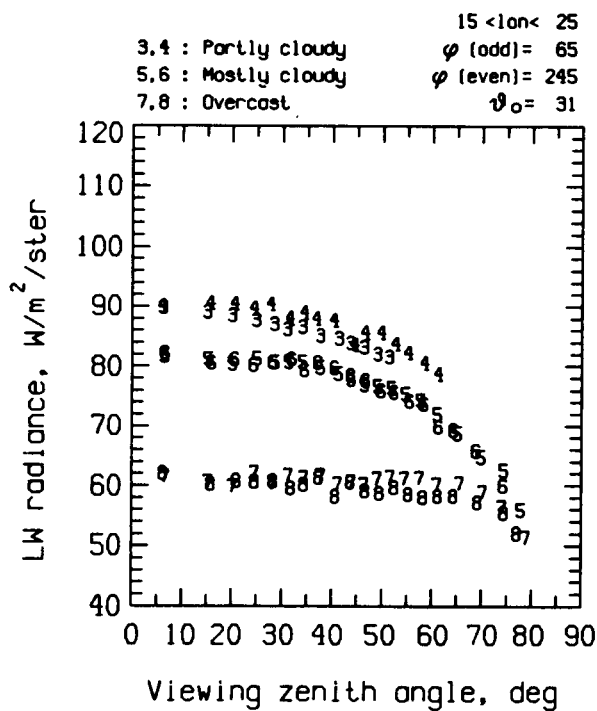


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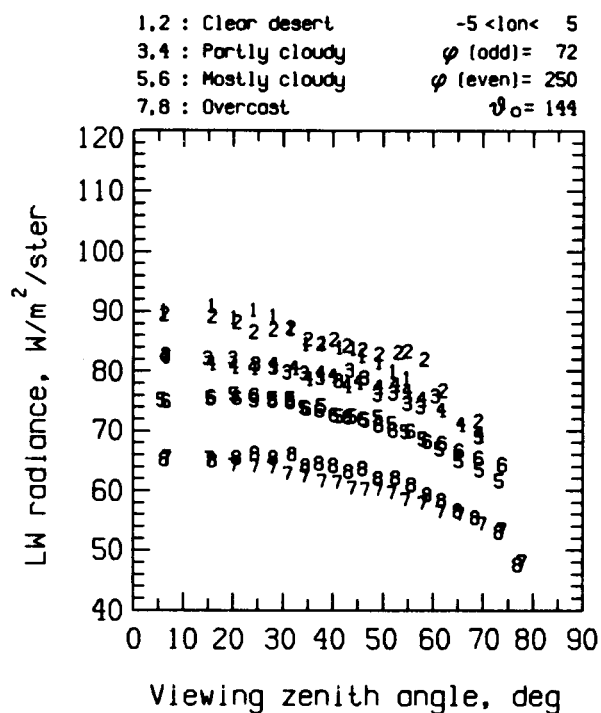


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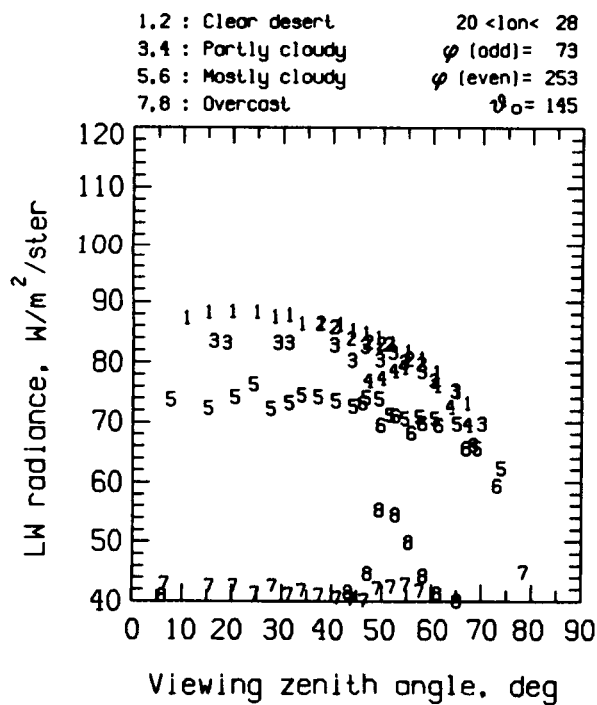


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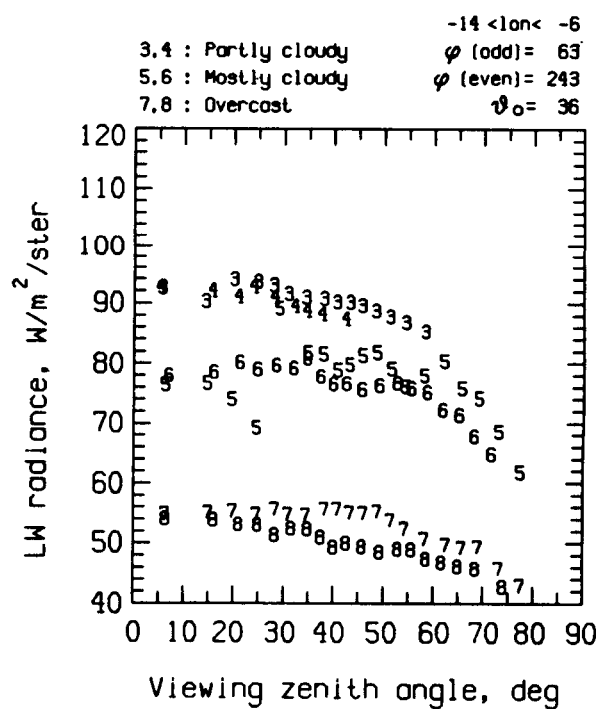


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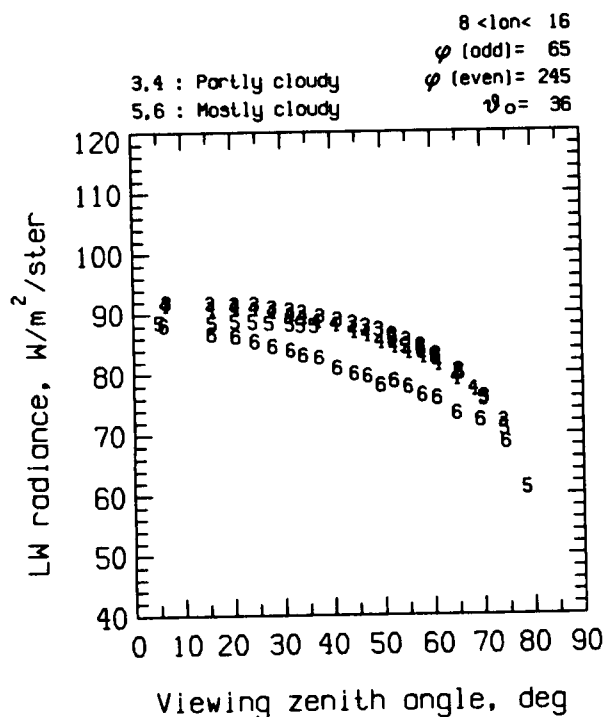


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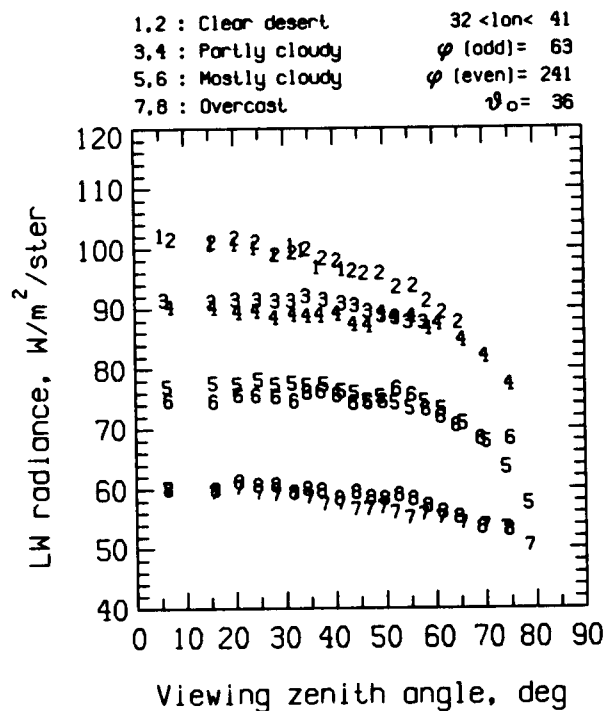


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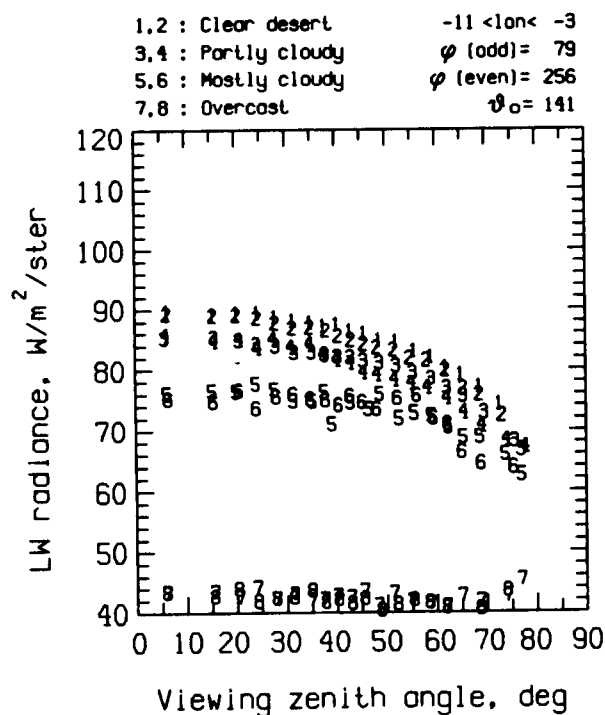


Figure 4.367 Sahel, Aug. 12.

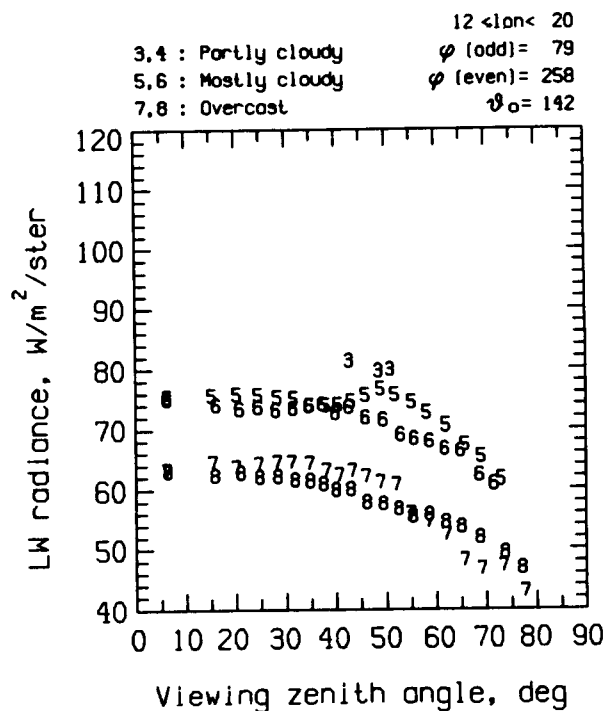


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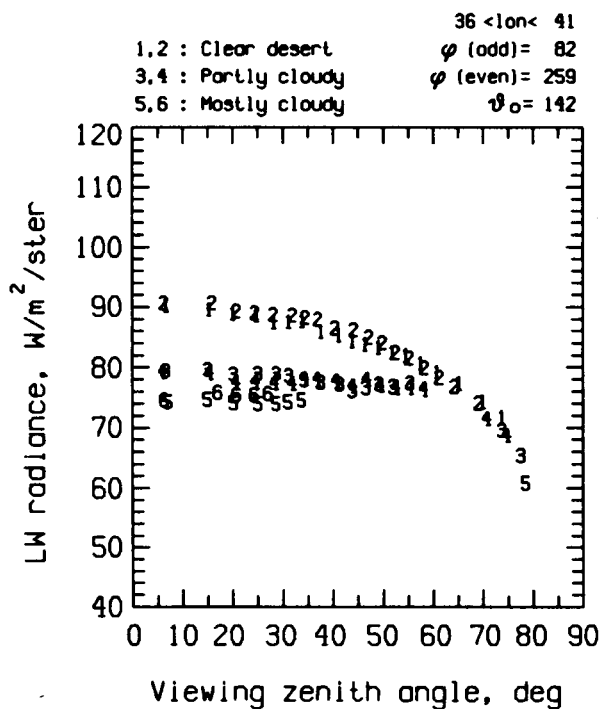


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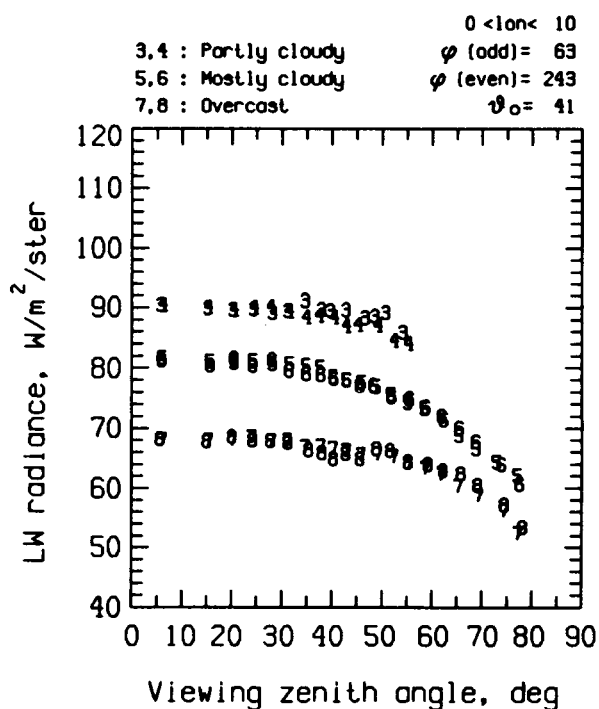


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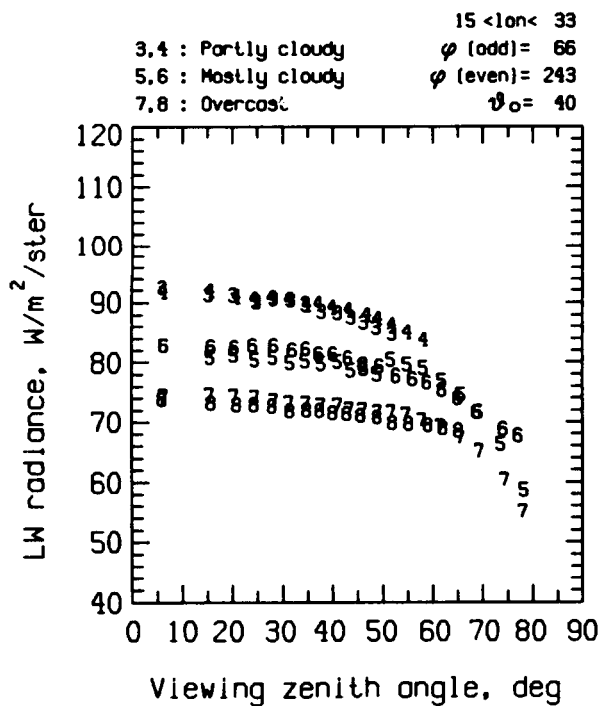


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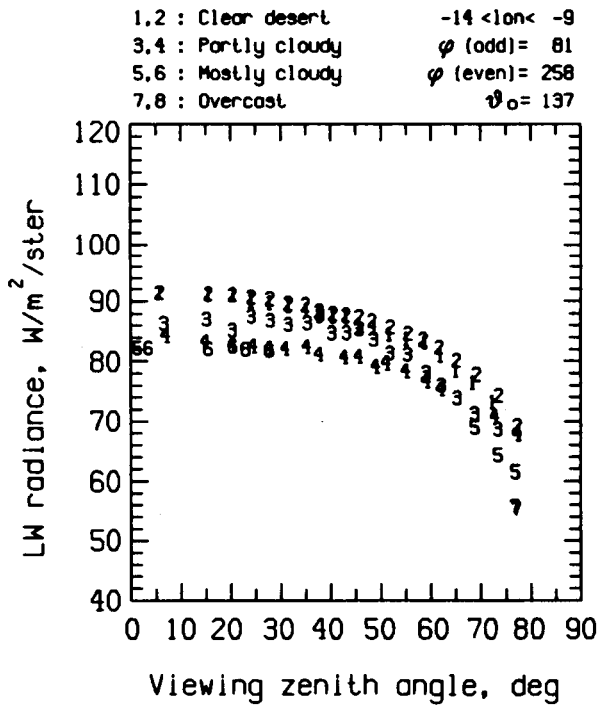


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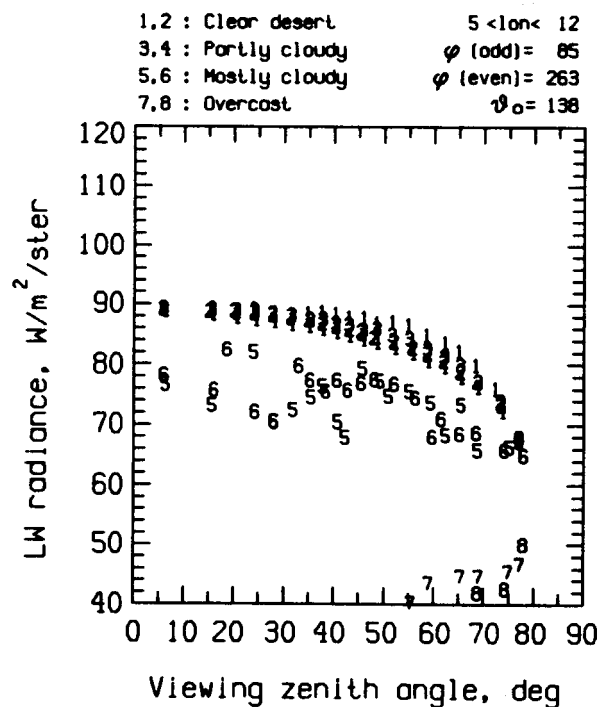


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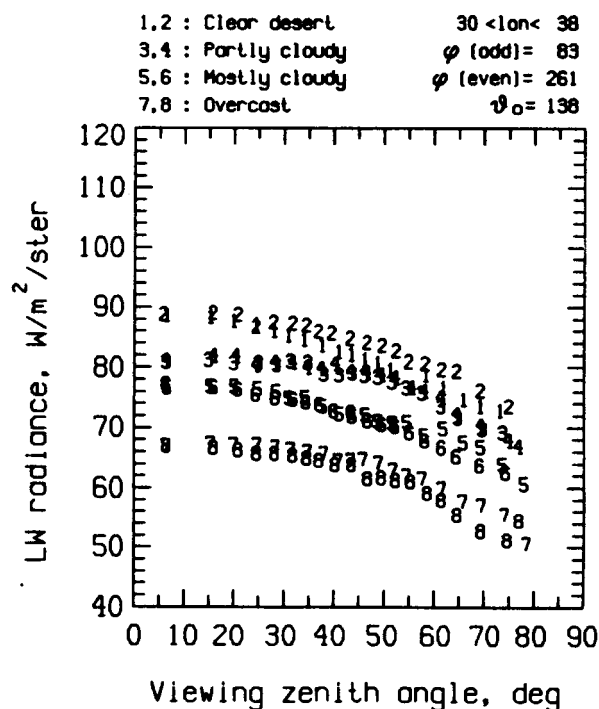


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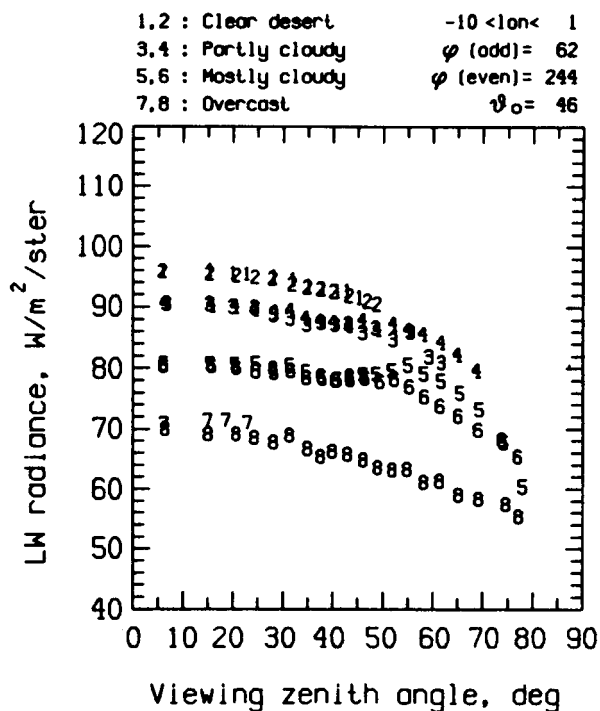


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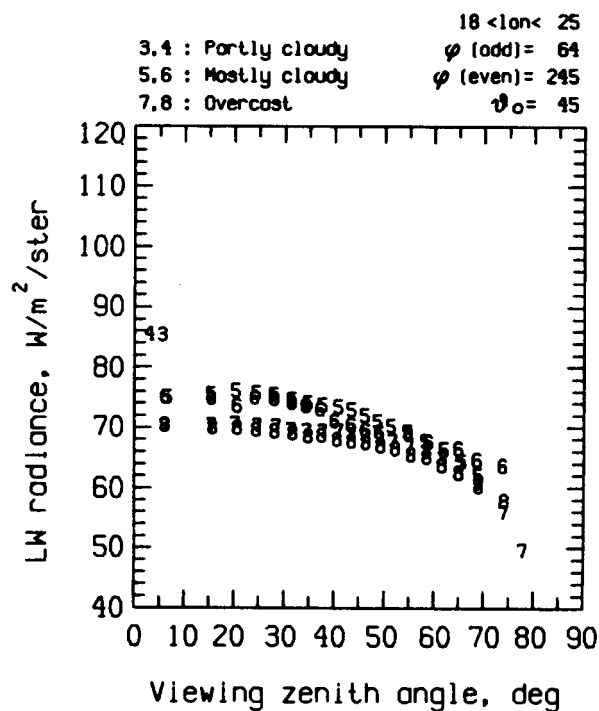


Figure 4.376 Sahel, Aug. 13.

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16. Abstract For several days in January and August 1985, the Earth Radiation Budget Satellite, a component of the Earth Radiation Budget Experiment (ERBE), was operated in an along-track scanning mode. A survey of radiance measurements is given for four desert areas in Africa, the Arabian peninsula, and Australia, and the Sahel region of Africa. Each overflight provides radiance information for four scene categories: clear, partly cloudy, mostly cloudy, and overcast. The data presented include the variation of radiance in each scene classification as a function of viewing zenith angle during each overflight of the five target areas. Several features of interest in the development of anisotropic models are evident, including day-night differences in longwave limb darkening and the azimuthal dependence of shortwave radiance. There is some evidence that surface features may introduce thermal or visible shadowing that is not incorporated in the usual descriptions of the anisotropic behavior of radiance as viewed from space. The data also demonstrate that the ERBE scene classification algorithms give results that, at least for desert surfaces, are a function of viewing geometry.					
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